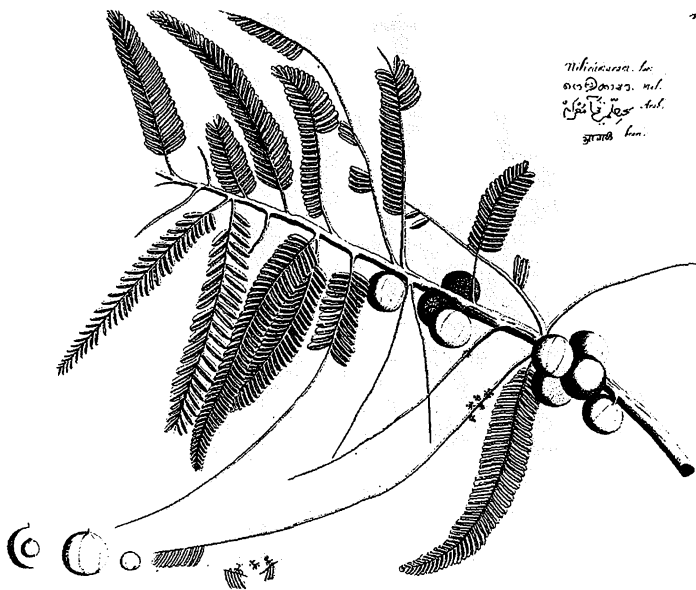


A History
of Indian Medical
Literature

VOLUME II A

Nelivincasa. L.
 നെളിവിങ്കാഴ. നീ.
 നെളിവിങ്കാ. തല.
 അമ്മ. ഭം.



Emblica officinalis Gaertn.
 Āmalakī
 Nellikka

G. Jan Meulenbeld

A History of
Indian Medical Literature

VOLUME IIA TEXT

EGBERT FORSTEN · GRONINGEN

2●●●

Sep/Se
main

Cover design: Françoise Berserik
Frontispice: Hortus Indicus Malabaricus, Vol. 1 (1678), tab. 38
by courtesy of the University Library Groningen
Typesetting and layout: Adriaensen & Barkhuis

This book was printed with financial support from the
Netherlands Organization for Scientific Research (NWO)
and the J. Gonda Foundation, Amsterdam

Publication of this work was made possible through the support of the editors of
Sir Henry Wellcome Asian Series, including Prof. Dr Paul Unschuld, Dr L. I. Conrad,
Dr D. Wujastyk, and Prof. R. E. Emmerick, and their institutions,
the Institute für Geschichte der Medizin, Ludwig Maximilians Universität, München,
the University of Hamburg, and the Wellcome Institute for the History of Medicine,
London. Marika Antoniw, Anne van der Spelt, Sue Hordijkeno, and Mohsina Somji
of the Wellcome Institute are especially thanked for their contribution to creating
the camera-ready copy of the book.

ISBN 90 6980 124 8



*This book meets the requirements of ISO 9706:1994
Information and documentation
Paper for documents-requirements for permanence*

Copyright © 2000 Egbert Forsten, Groningen, The Netherlands

*All rights reserved. No part of this publication may be reproduced, stored in a retrieval
system, or transmitted, in any form or by any means, electronic, mechanical, photocopying,
recording, or otherwise, without the prior written permission of the publisher.*

Contents

1994
V. D. A.
Main 1

PART 6	Some important authors and works	
1	Bower Manuscript	
2	<i>Bhelasaṃhitā</i>	13
3	<i>Kāśyapaśaṃhitā</i>	25
4	<i>Hārītaśaṃhitā</i>	42
5	Mādhava	61
6	Vṛnda	78
7	Cakrapāṇidatta	86
PART 7	Authors and works from A.D. 600–1500	115
1	Authors and works from the period A.D. 600–1000	117
2	Authors and works from the period A.D. 1000–1500	156
PART 8	Authors and works from the 16th to the 20th centuries	237
1	Sixteenth-century authors and works	239
2	Seventeenth-century authors and works	298
3	Eighteenth-century authors and works	329
4	Nineteenth-century authors and works	353
5	Twentieth-century authors and works	375
PART 9	Miscellanea	413
1	Works on pākāśāstra	415
2	Works on nāḍīśāstra	421
3	Various authors	434
4	Various anonymous works	492
5	Authors and works from Sri Lanka	547
6	Authors and works on veterinary medicine	557
PART 10	Works on rasaśāstra and ratnaśāstra	581
1	<i>Ānandakanda</i>	583
2	<i>Āyurvedaprakāśa</i>	593
3	<i>Gorakṣasaṃhitā</i>	602
4	<i>Kākacāṇḍeśvarīmatatantra</i> to <i>Rasaḥṛdayatantra</i>	608

5	<i>Rasajalanidhi</i>	623
6	<i>Rasakāmadhenu</i> to <i>Rasāmṛta</i>	629
7	<i>Rasapaddhati</i> to <i>Rasaratnadīpikā</i>	642
8	<i>Rasaratnākara</i>	653
9	<i>Rasaratnasamuccaya</i>	666
10	<i>Rasārṇava</i> and <i>Rasārṇavakalpa</i>	675
11	<i>Rasasaṃketakalikā</i> to <i>Rasendracūḍāmaṇi</i>	688
12	<i>Rasendramaṅgala</i> to <i>Rasopaniṣad</i>	714
13	Various works on rasaśāstra and ratnaśāstra	739
APPENDICES		789
1	Authorities associated with formulae	791
2	References to medicine in non-medical literature	818
ADDENDA ET CORRIGENDA & REPRINTS		833
Addenda et corrigenda		835
Reprints		841

Part 6

Some important authors and works

Chapter 1

Bower Manuscript

The *Bower Manuscript* is named after H. Bower who, being then a lieutenant, obtained it, early in the year 1890, in Kucā from a local inhabitant during a confidential mission from the Government of India. Kucā¹ is the name of one of the principal oases and settlements of Eastern Turkestan (part of China), on the ancient great caravan route to China. The MS was found by native treasure-seekers in a stūpa close to the Ming-Öi (the “Thousand Houses”, a system of rock-cut grottos with Buddhist shrines)² of Qum Turā, about 13 (or 16) miles from Kucā, in February 1890. ● On his return to India, Lieutenant Bower took the MS to Simla, whence it was forwarded to Colonel J. Waterhouse, who was then the President of the Asiatic Society of Bengal. Colonel Waterhouse exhibited the MS at the monthly meeting of the Society on November 5, 1890, when also a note from Lieutenant Bower was read, explaining the circumstances of the discovery. After the meeting some attempts were made to decipher the MS, but they proved unsuccessful.³ However, a German Indologist, G. Bühler, succeeded in reading and translating two leaves of the MS,⁴ reproduced in the form of heliogravures in the Proceedings of the Asiatic Society of Bengal.⁵ Immediately after his return to India in February 1891, A.F.R. Hoernle began to study the MS.⁶ At the meeting of the Society in April 1891, he was able to communicate the first decipherment.⁷ The Government of India sanctioned, in 1892, Hoernle’s proposal to prepare a complete edition of the text, illustrated with facsimile plates, and accompanied by an annotated English translation. The first part of the edition appeared in 1893, the second part (in two fasciculi) in 1894–95, and the remaining parts in 1897. After an interruption of several years, the Sanskrit Index was published in 1908, and a revised translation of the medical portions (I, II, and III) in 1909; the Introduction appeared in 1912.⁸

The Manuscript⁹

The term ‘Bower Manuscript’ is not strictly correct, since it is, as to size, a combination of two manuscripts, a larger and a smaller. The larger manuscript is a complex of six smaller manuscripts which are separately paginated. The Bower Manuscript is therefore, in reality, a collection of seven distinct manuscripts, indicated as parts I to VII in Hoernle’s edition.

The manuscript is written on fifty-one birch bark leaves of an oblong shape, in the form of those of an Indian pothī. The birch bark of the large portion of the manuscript is of a quality much inferior to that of the smaller portion. The hole for the passage of the binding string is placed about the middle of the left half of the leaves. This placement

of the string hole and the oblong form of the leaves point to an imitation of palm leaf pothīs from Southern India by the scribes of Kucā.¹⁰

The seven parts of the manuscript are written in an essentially identical script, the Gupta script, which prevailed in Northern India from the fourth to the sixth centuries A.D. Some graphic peculiarities of the Bower MS indicate, according to Hoernle, that it was written at some time within the fourth century A.D.¹¹ Distinctive characters of the script used enabled Hoernle to distinguish four different scribes,¹² who wrote parts I–III, part IV, parts V and VII, and part VI respectively. He also arrived at the conclusion that the writers of parts I–III and V–VII were natives of India who had migrated to Kucā. To judge from the style of writing, the scribe of parts I–III originally came from the northern, the two scribes of parts V–VII from the southern part of the northern area of the Indian Gupta script. The writer of part IV may have been a native of Eastern Turkestan. All four writers must have been Buddhist monks, residing in a monastery near Kucā.

The ultimate owner of the whole series of manuscripts, whose name appears to have been Yaśomitra,¹³ must have held a prominent position in that monastery, for the bundle of manuscripts was contained in the relic chamber of the memorial stūpa built in his honour.¹⁴

Language

The language in which the treatises of the Bower MS are written is a kind of mixed Sanskrit, i.e., a mixture of current literary Sanskrit and a Sanskrit with a varying proportion of prakritisms. The influence of Prakrit is far more pronounced in the more popular treatises on divination and incantation in parts IV–VII than in the more scientific medical treatises of parts I–III.¹⁵

Contents

Parts I to III, the three medical treatises of the collection, comprise a total of 1,323 verses and some prose;¹⁶ almost all the stanzas are written in three metres, the śloka, triṣṭubh, and āryā; the śloka predominates, taking up about seventy percent of the whole. The total number of different metres is twenty-three;¹⁷ part I, in proportion to its extent, contains an extraordinarily large number, not less than nineteen, distributed over 132 verses; in part II there are nine metres to 1,119 verses, and in part III four metres to seventy-two verses. It is evident from this familiarity with metrical writing that the author of the three medical treatises was well versed in Sanskrit composition. Although the substance of part II, which is a compilation, is not his own original composition, certain portions of it may well be his own contribution, not only the ten introductory verses, but also a number of scattered stanzas.¹⁸ In contrast with the treatise in part II, the treatises in parts I and III do not consist of compilations from earlier sources, but are rather original compositions.

The author of parts IV–VII was not conversant with scholarly Sanskrit; these treatises are written in a mixed type of language. A considerable portion is in prose, and

whatever is in metrical form, is entirely in the easy śloka metre. The surviving fragment of part VII is entirely in prose; the only portion of part VI that is metrical is the charm in seventeen verses. Part V, on the other hand, is entirely in verse, and so is part IV, with the exception of its five introductory lines, which are in prose.

Part I opens with a flowery description of the Himālayas, where a group of munis reside, interested in the names and properties of medicinal plants.¹⁹ Mentioned by name are the following sages: Ātreya, Hārīta,²⁰ Parāśara, Bhela, Garga, Sāmbavya,²¹ Suśruta, Vasiṣṭha, Karāla, and Kāpya (7–8). Suśruta, whose curiosity is aroused by a particular plant, approaches muni Kāśīrāja,²² enquiring about the nature of this plant. Kāśīrāja, granting his request, tells him about the origin of the plant, which proves to be garlic (laṣuna), its properties and uses (9–43). Kāśīrāja's exposition on the subject is called the laṣunakalpa, as taught by the ancient sages.

A small tract on miscellaneous subjects follows. It contains verses on the digestive fire (agni; 44–51),²³ some rasāyana formulae (52–54), technical rules about the proportions of the ingredients of compound medicines (55–59), a vājīkaraṇa formula (60), and a rasāyana recipe attributed to Agastī (61–68).

Next come sections devoted to eye lotions (āścyotana; 68–86), face plasters (mukhalepa or vadanapralepa; 87–105), collyria and pastes for the eyelids (añjana, viḍālaka;²⁴ 106–111), remedies against baldness and grey hair (khālitya and palita; 112–120), and recipes against cough, especially cough caused by deranged vāta (121–132).

Part II, which opens with a salutation addressed to the Tathāgatas, contains, as stated by the author, the *Nāvanītaka*,²⁵ a standard manual (siddhasaṃkarṣa), containing the foremost formulae of the great sages, made up by them of old (1–2). It was originally divided into sixteen chapters (adhyāya), the headings of which are enumerated in the introductory verses (4–9). The introduction ends with the recommendation not to transmit the *Nāvanītaka* to anyone without a son, a brother or a disciple.

Chapter one (11–107; on cūrṇayogas according to the introduction and the colophon) contains recipes for powders (cūrṇa), linctuses (leha) and pills (guḍikā); chapter two (108–260) deals with medicated ghees (ghṛta), and chapter three (261–403) with medicated oils (taila).

The contents of chapter four (miśra; 404–617) are of a miscellaneous nature: two recipes against vātarakta (404–405), four recipes against āmātiśāra (406–412), four recipes for mahāsaṃgrāhika preparations²⁶ (413–417), a formula for a styptic (sthāpana) to be employed in haemorrhagic conditions (raktapitta) and abortions (pracyutagarbha) (418–425), four formulae against pravāhikā (426–430), twenty formulae against cough (kāsa) (431–468), five formulae against hiccup (hikkā) (469–473), eight formulae against cough (474–483), two formulae against a wide range of diseases (484–494), six formulae against fevers (494–505), two formulae against various disorders (505–508), five formulae²⁷ against diseases of the head (śīrṣaroga) (508–521), three formulae against coryza (pratiśyāya) (522–524), four formulae against toothache (dantaśūla) (525–531), six formulae against diseases of the ears (karṇaśūla) (532–542), formulae against some skin diseases (542–569), four

formulae against sidhma (569–574), seven formulae against strangury (mūtrakṛcchra) (575–584), a formula against epistaxis (584), four formulae against inflammatory swelling (śoṭha) (585–592), five formulae against vomiting (chardi) (593–597), three formulae against morbid thirst (tṛṣṇā) (598–602), six formulae against urinary disorders (prameha) (603–608), four formulae against erysipelas (visarpa) (608–613), and three formulae against morbid pallor and jaundice (pāṇḍu and kāmālā) (614–617).

Chapter five (618–648) contains formulae for enemas (basti),²⁸ and chapter six (715–784) rasāyana formulae. Chapter seven (785–813) is about gruels (yavāgū). Chapter eight (814–817) is concerned with aphrodisiacs (vr̥ṣya), chapter nine (848–890) with collyria (añjana), and chapter ten (891–916) with hair dyes (keśarāga).²⁹

Chapters eleven (917–949), ten (950–967), and eleven (968–976)³⁰ describe the kalpas of haritakī, śilājatu, and citraka.

Chapter fourteen (1010–1119), which is incomplete, is about the treatment of children's diseases (kumārabhṛtya). Chapters fifteen and sixteen, missing in the MS, were, according to the table of contents at the beginning of part II, about the treatment of barrenness (vandhyācikitsita) and disorders in pregnant and nursing women (subhagācikitsita).

Part III is a fragment of a formulary, the contents of which correspond to chapters one to three of part II. It contains formulae arranged according to the type of preparation, but this arrangement is inconsistent in the preserved portion. The preparations are mixed up: oils (1–4; 5–9; 10–14; 36–53), a powder (15–19), linctuses (20–24; 61–62), a ghee (25–36), liniments (lepa; 54; 55–56; 65), boluses (modaka; 57–60), and pills (63–64; 66–72).

Parts IV and V contain two short manuals of Pāśakakevalī, or cubomancy, i.e., the art of foretelling a person's future by means of the cast of dice. Part IV is a practically complete treatise on this art, while the manual in part V, quite independent of that in part IV, is very fragmentary.

Parts VI and VII contain two different portions of the same text, the *Mahāmāyūrī Vidyārājñī*, a Buddhist dhāraṇī that protects against snake-bite and other evils.³¹

Medical authorities mentioned in parts I–III are: Agastī,³² Agastya,³³ the Aśvins,³⁴ Ātreya,³⁵ Bhela,³⁶ Brahmā,³⁷ Brhaspati,³⁸ Cyavana,³⁹ Dhanvantari,⁴⁰ Garga,⁴¹ Hārīta,⁴² Janakēśvara,⁴³ Jīvaka,⁴⁴ Kāṅkāyana,⁴⁵ Kāpya,⁴⁶ Karāla,⁴⁷ Kāśīrāja,⁴⁸ Kāśyapa,⁴⁹ Keśava,⁵⁰

Māṇibhadra,⁵¹ Mārkaṇḍeya,⁵² Nārāyaṇa,⁵³ Nimi,⁵⁴ Parāśara,⁵⁵ Śaiveśvara,⁵⁶ Śakra,⁵⁷ Śāmbavya,⁵⁸ Suprabha,⁵⁹ Suśruta,⁶⁰ Svayaṃbhūti,⁶¹ Uśanas,⁶² Vādvali,⁶³ Vāsava,⁶⁴ Vasiṣṭha,⁶⁵ and Viśvāmitra.⁶⁶

Hoernle's edition of the Bower MS is extensively annotated. A large part of the notes to parts I–III is devoted to parallels of the formulae in other treatises and the search for possible sources. P. Cordier contributed to these investigations and some important additions to Hoernle's discoveries are owed to his intimate knowledge of the medical literature.⁶⁷ J. Jolly⁶⁸ also added parallels to Hoernle's early annotated translation.

Twelve passages are found in the *Bhelasamhitā*,⁶⁹ three of which only are explicitly attributed to Bhela. These twelve passages, containing recipes, are:⁷⁰ (1) II.43–55 (ayorājīyacūrṇa) = Bhela Ci.17.33–45 (ayorājīya); (2) 165–169a (rasāyanikaghṛta) = Ci.4.34cd–38ab (rasāyanīyasarpis); (3) 202–203 (daśāṅgaghṛta) = Ci.5.17–19 (daśāṅgaghṛta); (4) 329–330a (sahacarataila) = Ci.24.32a–33 (sahacarataila);⁷¹ (5) 337–343 (madhuyaṣṭikataila) is closely related to Ci.4.79–90 (śatapākamadhukataila); (6) 407–408 (a formula against āmātīsāra) = Ci.10.12–13; (7) 409–410 (idem) = Ci.10.6–7; (8) 411–412 (idem) = Ci.10.8–9; (9) 474–479 (a recipe against cough) = Ci.20.26cd–32 (475 is more distantly related to Ci.20.27cd–28); (10) 534b–537a (a recipe against karṇaśūla) = Ci.21.53–55; (11) 642–644 (tailādyabasti) is related to Si.8.60–62; (12) 803–804, a mantra to be recited after taking the bhelī yavāgū (802), is found at Bhela Sū.7.16–17, where it is not connected with any gruel, but with general rules for the preservation of health.⁷²

It may well be that more recipes of the Bower MS would prove to derive from Bhela, if it were possible to consult a complete MS of the *Bhelasamhitā*. Three recipes of the Bower MS, absent from the Tanjore MS of the *Bhelasamhitā*, are attributed to Bhela in Candrapā's *Yogaratanasamuccaya*:⁷³ II.280–286 (balātaila), 399–401 (gaṇḍa-mālāyoga), and 1059–1060 (lākṣādisarpis).

A considerable number of formulae from parts I–III of the Bower MS form part of the *Carakasamhitā*, although Caraka is never mentioned, nor Agniveśa. These formulae are:⁷⁴ (1) II.11–13 (tālīsakacūrṇa) = Ca.Ci.8.145–147 (tālīśādyacūrṇa); (2) 14–17 (śāḍavacūrṇa) = Ci.8.141–144 (yavānīśāḍava); (3) 24a = Ci.5.92cd; (4) 25–26 (vardhamānakacūrṇa) = Ci.8.103–104; (5) 29–34 (mātuluṅgagutīkā) = Ci.5.79–84 (hiṅvādicūrṇaṃ gutīkā ca); (6) 133–136 (tikṭakaghṛta) = Ci.7.140–143 (tikṭa-śaṭpalakaghṛta); (7) 137–143 (mahātikṭakaghṛta) = Ci.7.144–150 (mahātīkakaghṛta); (8) 150–151 (śaṭpalaghṛta) = Ci.5.147–148 (kṣīraśaṭpalakaghṛta); (9) 152 (tryū-ṣaṇaghṛta) = about the same as Ci.5.65cd–66ab (tryūṣaṇādighṛta); (10) 153–154 (vāsāghṛta) is related to Ci.5.126–127 (vāsāghṛta); (11) 155–157 (cāṅgerīghṛta) = Ci.14.110–112; (12) 169–176 (śaramūlīyaghṛta) = Ci.21.24cd–33ab (br̥ṇhaṇī-gutīkā); (13) 188–200 (cyavanaprāśaghṛta) = Ci.11.62–74 (cyavanaprāśa); (14) 383–385 (jvaraharānuvāsanataila) = Ci.3.250–251; (15) 386–389 (anuvāsanataila) = Ci.14.131–134; (16) 460–462 = Ci.5.123–125 (drākṣādyaghṛta); (17) 484–490 (prasthavireka) is related to Ci.5.154–160 (dantīharitakī); (18) 491–493 (madhvā-savayoga) = Ci.6.41–44 (madhvāsava); (19) 494–495a = Ci.3.206–207ab; (20) 496b–499a = Ci.3.200cd–203ab; (21) 603 (pramehapaśāmanayoga) = Ci.6.26; (22) 645–649 (picchābasti), a recipe found in Ci.10, according to Hoernle, but absent there;⁷⁵ (23) 742–743 = Ci.13.30–31 (medhyarasāyana); (24) 745–748 (pippalī-prayoga) = Ci.13.32–35 (pippalīrasāyana); (25) 749–752 (dvitīyapippalīprayoga) = Ci.13.36–40; (26) 819 = Ci.23.18 (vṛṣya śatavārīghṛta); (27 and 28) 844b–846a = Ci.21.46–47 (vṛṣyamāṃsa and vṛṣyamāśayoga); (29) 957–967a (śilājatukalpa) = Ci.13.48–65 (śilājaturasāyana).

Hoernle claimed⁷⁶ that parallels of six formulae from the *Nāvanītika* occur in the

Suśrutasaṃhitā.⁷⁷ *Nāvanītaka* 407–412, a series of prescriptions against āmātīsāra, also found in the *Bhelasamhitā*, is, in his view, based on Su.U.40.34cd–46, a long prescription on the treatment of āmātīsāra, consisting of twenty options and a single directive statement at the end. He argued that both the *Bhelasamhitā* and the *Nāvanītaka* have drawn upon the Uttaratāntra of the *Suśrutasaṃhitā* in their verses on the therapy of the disorder. His assertion on this point seems arbitrary; the textual disagreements plead against it, as well as the chronological position of the Uttaratāntra.⁷⁸

Hoernle was also convinced⁷⁹ that three aphrodisiac formulae (829–830a; 833–835a) corresponded to some verses from the *Cikitsāsthāna* of the *Suśrutasaṃhitā* (from Ci.26.27cd–34), but, in this case too, the resemblances are superficial and not convincing.⁸⁰

P. Cordier⁸¹ advanced that *Nāvanītaka* 188–200 (the formula of cyavanaprāśaghṛta) goes back to Agniveśa, 277–279 (the second formula of balātāila) to Hārīta, 251–257 (the formula of bindughṛta, attributed to the Aśvins) to Kṛṣṇātreyā,⁸² and III.37–52 (the formula of siddhāhārthakataila, attributed to Nārāyaṇa) to Śālihotra. The formula of sūkṣmēlavardhamānaka (*Nāvanītaka* 64–65) is, according to P. Cordier, found in chapter two of the *Bṛhadvaidyaprasāra*, and twenty-eight verses are said to occur in the *Kalyāṇasaṃgraha*.

In spite of Hoernle's efforts in tracing the formulae of the *Nāvanītaka* in other medical works,⁸³ many of them remain unidentified.⁸⁴

Some recipes from the *Nāvanīta(ka)* form part of Cakrapāṇidatta's *Cikitsāsaṃgraha*, as indicated by Niścala.⁸⁵

One formula is found in Niścala's *Ratnaprabhā*.⁸⁶

A *Nāvanītaka* is quoted by Anantakumāra,⁸⁷ Candrāṭa,⁸⁸ Niścalakara,⁸⁹ and Śivādāsaśena.⁹⁰ A *Nāvanītakasaṃhitā* is one of the sources of the *Rasayogasāgara*.

Parts IV and V of the Bower MS have no relevance to medicine, being works on fortune-telling, a subject belonging to the province of jyotiṣa.⁹¹ Hoernle believed it to be probable that part V is one of the numerous recensions of the work on Pāśakakevalī, the divination by dice, ascribed to the ancient sage Garga,⁹² who is known as an authority on jyotiṣa.

Parts VI and VII contain two portions of the *Mahāmāyūrī Vidyārājñi*,⁹³ a well-known Buddhist charm (dhāraṇī). Part VI opens with a story about the Buddha who gives the *Mahāmāyūrī* spell to Ānanda in order to save the life of the young bhikṣu Svāti who was bitten by a snake.⁹⁴ The *Mahāmāyūrī* forms part of the *Pañcarakṣā*, a collection of five dhāraṇīs.⁹⁵ The version in the *Pañcarakṣā* is much longer than the earlier one, represented by the portions preserved in parts VI and VII of the Bower MS. The expanded version appears to have developed in the course of the fifth or sixth centuries A.D. Three of the six translations in the Chinese *Tripiṭaka*⁹⁶ are based on the expanded recension, while the three others show a more primitive form. The latter three belong to the fourth century A.D. Originally, the *Mahāmāyūrī* seems to have been a separate work, independent of the *Pañcarakṣā*.⁹⁷

The *Mahāmāyūrī* is mentioned in Vāgbhāṭa's *Aṣṭāṅgasaṃgraha*⁹⁸ and Soḍhala's *Gadanigraha*.⁹⁹ It is also referred to in Bāṇa's *Harṣacarita*, where the author says that it was recited when Prabhākaraśārdhana, Harṣa's father, was dying.¹⁰⁰

Special features

The description in part I of the assembly of sages in the Himālayas shows resemblances with the way in which the *Carakasamhitā* begins, but the composition of the group is different and the divine origin of āyurveda is not mentioned. Remarkable is the rôle played by Suśruta and his teacher Kāśirāja in the verses introducing the laṣunakalpa.¹⁰¹

A noteworthy feature of part I is this laṣunakalpa,¹⁰² which occurs separately from the three kalpas in part II. Kalpas of the type found in the Bower MS constitute an essential part of Sanskrit medical lore. They usually describe the mythical origin of a particular medicinal plant, its names, properties, actions, and a variety of recipes in which the plant is an important ingredient. The laṣunakalpa of the Bower MS has parallels in other medical treatises, for example the *Aṣṭāṅgahṛdayasamhitā* (U.39.111–129), *Aṣṭāṅgasamgraha* (U.49.161–213), *Kāśyapasamhitā* (Kalpasthāna, laṣunakalpādhyaṃya), and *Hārītasamhitā* (Kalpa 4).¹⁰³ The stories about the origin of garlic vary in these texts, but all the versions connect it with the rape of the amṛta at the churning of the ocean.¹⁰⁴ The account of the Bower MS on the properties and uses of garlic shows some peculiarities which are absent from or disagreeing with other medical texts.¹⁰⁵ A garlic-festival (laṣunotsava) is described (I.17–18), and a procedure which circumvents the interdiction for brāhmaṇas to make use of garlic, by making it pass through a cow (I.34).¹⁰⁶

The haritākīkalpa of the Bower MS has parallels in the haritākīkalpas of the *Hārītasamhitā* (Kalpa 1) and *Aśvinīsamhitā*.¹⁰⁷ The story about the mythical origin of haritākī is told in a number of medical texts.¹⁰⁸ In the same vein as many medical treatises, the Bower MS enumerates seven kinds of haritākī.¹⁰⁹ A close parallel to the śilājātukalpa occurs in the *Carakasamhitā* (Ci.13.48–65).¹¹⁰ Other versions of a śilājātukalpa form part of a number of medical treatises.¹¹¹ The third kalpa of the Bower MS, the citrakakalpa, has almost no parallels elsewhere in medical literature.¹¹²

The well-known rasāyana procedure, called pippalīvardhamāna, differs in the Bower MS (II.716–737) from the related prescription found in a large number of Sanskrit treatises,¹¹³ in being more complicated and taking a much longer time for its completion. The patient is advised to take one long pepper (pippalī) on the first day, and to increase the dose for ninety-nine consecutive days by one pepper daily, resulting in an intake of one hundred long peppers on the hundredth day. Thereupon, the dose is to be reduced by one pepper each day. At the end of this course a particular diet is to be observed for twenty-one days. An alternative shortened version of the procedure is also described in the Bower MS (II.749–752: pippalīśahasra).¹¹⁴

An important peculiarity of the Bower MS consists of its varying attitude towards the number of the doṣas. In many instances it accepts the traditional number of three, vāta, pitta, and kapha,¹¹⁵ but in a smaller number of passages it appears to accept blood (rakta) as a doṣa. A series of drugs are enumerated which cure in the rainy season disorders caused by vāta, in the autumn diseases caused by pitta, in the summer diseases brought about by blood, and in the spring diseases caused by kapha.¹¹⁶ Four compound medicines are described which respectively relieve disorders originating from kapha, blood (asra), pitta, and vāta (I.106–108).¹¹⁷ Vāta, rakta, pitta, and kapha are mentioned

as the causes of diseases that may be cured by use of the *amṛtataila* (II.308–309). Disorders brought about by pitta, blood (*asra*), and *vāta* are also referred to (I.84–85).

Noteworthy technical terms, occurring in the Bower MS, are: *anuprayoga* (II.55), after-diet, i.e., the type of food to be taken after the ingestion of a particular drug;¹¹⁸ *avabhedaka* (II.512), a discharging application, for example an errhine; *avakṣārī* (II.91), a difficult term, taken by Hoernle to mean a lixivium, but possibly a corrupt reading; *āvalika*, a term specifying a particular *rasāyana* that consists of finely powdered *nāgabalā* roots, stirred up in milk (II.753–758); *āsu* (I.55), regarded as identical with *āsava*; *lāva rasa* (II.1116);¹¹⁹ *pīṣima* (II.578), a paste; *sasyikā* (II.400), a faultless female animal; *unmardana* (II.1053), a liniment.¹²⁰

Nosological terms worthy of attention are: *abhīlu* (I.88, 100, 102);¹²¹ *akākolīna* (III.62);¹²² *alāsaka* (II.334 and 748);¹²³ *ālūna* (II.849, 874, 876);¹²⁴ *apatāntraka* (II.316);¹²⁵ *bhūtagraha* (II.101);¹²⁶ *īrṣyāśaṇḍha* (II.350 and 360);¹²⁷ *kacchaparoga* (II.254);¹²⁸ *kākavandhyā* (III.47);¹²⁹ *kaṇṭhaviḍālikā* (II.42);¹³⁰ *katrimālā* (III.4);¹³¹ *khaḍa* (II.359);¹³² *khallivāta* (II.392);¹³³ *koṭha* (II.568);¹³⁴ *kṣaya* (II.86);¹³⁵ *kuṣṭha* (II.86);¹³⁶ *nirvāhikā* (II.427);¹³⁷ *paillyā* (II.854 and 857);¹³⁸ *parisravā* (III.49);¹³⁹ *pilla* (II.863 and 882);¹⁴⁰ *pilpa* (I.100);¹⁴¹ *pratānaka* (II.340 and 941);¹⁴² *pravāhikā* (II.84, 157, 388, 429, 430, 943, 1090, 1094);¹⁴³ *upagulma* (II.254);¹⁴⁴ *urodghāta* (II.1099);¹⁴⁵ *urovibhāṇḍha* (II.33);¹⁴⁶ *ūrdhva-vāta* (II.250);¹⁴⁷ *ūrūskambha* or *ūrūskambha* (II.316, 334, 349, 357, 392);¹⁴⁸ *vardhma* (II.208, 230, 272, 317, 334, 644).¹⁴⁹

Noteworthy items of the *materia medica* are:¹⁵⁰ *abhīruparṇī* (II.129);¹⁵¹ *abhīta-parṇī* (II.187);¹⁵² *agaja* (I.25);¹⁵³ *amarajā* (II.81);¹⁵⁴ *amlātaka* (II.106);¹⁵⁵ *candanāśirivā* (II.241);¹⁵⁶ *ciḍā* (II.856);¹⁵⁷ *ḍembuka* (II.837);¹⁵⁸ *garuḍī* (II.887);¹⁵⁹ *grāha* (II.1100);¹⁶⁰ *guḍikā* (II.1035);¹⁶¹ *harita* (I.111);¹⁶² *iṣṭakāpāthaka* (III.65);¹⁶³ *japā* (II.959);¹⁶⁴ *jhāmaka* (I.90);¹⁶⁵ *jīṅgaṇī* (II.1073);¹⁶⁶ *kāla* (II.1103 and 1115);¹⁶⁷ *keyūra* (II.536);¹⁶⁸ *kuśālaparṇī* (II.796);¹⁶⁹ *māruta* (I.125);¹⁷⁰ *maṣī* (II.1072);¹⁷¹ *mecīka* (II.415);¹⁷² *naḍa* (I.72);¹⁷³ *naḍikā* (II.292);¹⁷⁴ *prācīnikā* (II.879);¹⁷⁵ *priyakasāla* (II.397);¹⁷⁶ *rāmataruṇī* (II.901);¹⁷⁷ *saurāṣṭra* (II.57).¹⁷⁸

In spite of its being used in a Buddhist community, the *Nāvanītaka* does contain formulae in which the flesh of various animals is prescribed as an ingredient.¹⁷⁸ Moreover, persons making a habit of the use of alcoholic drinks are not looked down upon.¹⁷⁹

The *Mahāmāyūrī* is said to protect against a long series of *grahas* and diseases. The *grahas* mentioned are called *Deva*, *Nāga*, *Asura*, *Maruta*, *Garuḍa*, *Gandharva*, *Kinnara*, *Mahoraga*, *Yakṣa*, *Rākṣasa*, *Preta*, *Piśāca*, *Bhūta*, *Kumbhāṇḍa*,¹⁸⁰ *Pūtana*, *Kaṭapūtana*, and *Skanda*.¹⁸¹

Among the evils and diseases enumerated are *unmāda*, *chāyāgraha*,¹⁸² *apasmāra*, *Ostāraka*,¹⁸³ *Kankhorda*,¹⁸⁴ *Okiraṇa*,¹⁸⁵ *Vetālas*, a long series of fevers,¹⁸⁶ a number of other diseases, and a series of *śūlas*.

The author(s)

The authors of the texts comprising the Bower MS are unknown. The *laśunakalpa* of part I is unhesitatingly ascribed to Kāśirāja by G. Hāldār,¹⁸⁷ who also expressed as his

opinion that the *Nāvanītaka* of the Bower MS represents an altered, Buddhist version of an original *Nāvanītakasaṃhitā* by Suśruta.¹⁸⁸

Date

Hoernle concluded that characteristics of the script of the Bower MS point to the third quarter of the fourth century A.D. as the period in which the various portions must have been written.¹⁸⁹ Hoernle's dating is accepted by later authors, with the exception of J. Filliozat, in whose view it is preferable to adhere to a more approximate date, namely the fourth to sixth centuries.¹⁹⁰

The period in which the texts composing the Bower MS may originally have been written is more difficult to determine. A number of details of the Bower MS establish beyond any doubt that its texts were copied from an already defective, not always easily legible, and therefore probably old MS.¹⁹¹ Consequently, there must have been an interval between the writing of the autograph and the copying by the scribes of the Bower MS.

Some peculiarities of the MS may go back to the original author; part II, the *Nāvanī-taka*, and part III contain glosses, indicated as such, which the author may have added to the extracts from earlier authoritative works of which his work is mainly composed.¹⁹²

Hoernle adduced arguments pointing to a succession of copies between the autograph of the *Nāvanītaka* and its copy in the Bower MS. He was convinced to have discovered indications testifying to a rather considerable interval, perhaps two or three centuries, between the composition of the *Nāvanītaka* and the copy known to us. Although his reasoning in this matter is not cogent, his conclusions may well be valid.

Hoernle tried to prove that the original author of the *Nāvanītaka* was acquainted with the *Bhelasamhitā*, the *Carakasamhitā* before its revision and completion by Dṛdhabala, and the *Suśrutasaṃhitā*, its Uttaratantra included.¹⁹³ His reasoning was based on formulae in the *Nāvanītaka* that also form part of these treatises, and the references to Bhela and Suśruta in parts I and II of the Bower MS.¹⁹⁴

However, as already clearly pointed out by J. Jolly,¹⁹⁵ Hoernle's arguments are not conclusive. The way in which Suśruta is introduced in part I, and his relationship with the muni Kāśirāja, disagree with the beginning of the *Suśrutasaṃhitā*, which, moreover, does not contain a laśunakalpa, the subject of the conversation between Suśruta and Kāśirāja. The formulae, said to be derived from the *Suśrutasaṃhitā*,¹⁹⁶ are only distantly related to the parallels.¹⁹⁷ To be true, Bhela is credited with some formulae, which proves that he was already a well-known medical authority, but the majority of the passages of the *Nāvanītaka* that form part of the *Bhelasamhitā* are not attributed to him and may be drawn from the floating medical tradition or early treatises, now lost. Caraka and his predecessor, Agniveśa, are not referred to at all, which pleads against borrowing from the *Carakasamhitā*.¹⁹⁸ Ātreya, Agniveśa's teacher in the *Carakasamhitā*, is mentioned, but the formulae ascribed to him are absent from the *Carakasamhitā*.¹⁹⁹

Consequently, it is preferable to suppose, as Jolly did, that the author of the *Nāvanītaka* drew upon the floating medical tradition and early treatises that have not been

preserved. However that may be, the medical parts of the Bower MS (I–III) constitute the earliest collections of recipes known. They give evidence of a long medical tradition, connected with numerous ancient authorities, and may be based on similar collections or other types of medical writings antedating the composition of the *saṃhitās* of Caraka, Suśruta and others.

Chapter 2

Bhelasamhitā

The *Bhelasamhitā*¹ is a comprehensive medical treatise chiefly concerned with internal medicine (kāyacikitsā). It is in many respects of the same type as the *Carakasamhitā* and may be said to belong, as the latter, to the school of Ātreya, although it also contains elements found in the *Suśrutasamhitā*, which gives it an unusual character.

The text of the *Bhelasamhitā* has been preserved in a single MS, incomplete and abounding with scribal errors, kept at the Mahārāja Serfoji's Sarasvatī Mahāl Library in Tanjore.² Several copies of this MS have been made in the course of time,³ and three editions have appeared, based on the MS itself or its copies.⁴

A fragment of the *Bhelasamhitā* was discovered by H. Lüders⁵ among the MSS brought from Central Asia by A. von Le Coq. This fragment consists of one page from a paper MS, found in Tuyoq,⁶ that dates from about the ninth century; it contains the text of Nidānasthāna 8.5cd to Vimānasthāna 1.22ab. The readings of this fragment are at places to be preferred to those of the Tanjore MS.

Contents

The contents of the *Bhelasamhitā* are summarily listed in the middle of the Sūtrasthāna (17.7cd–9ab), and said to consist of a Sūtrasthāna in thirty chapters, a Nidāna-, Vimāna- and Śārīrasthāna in eight chapters,⁷ an Indriyasthāna in twelve chapters, a Cikitsāsthāna in thirty, a Kalpasthāna in twelve, and, finally, a Siddhisthāna in twelve chapters. This table shows that the arrangement in sections (sthāna) and the number of chapters in each section are exactly the same as in the *Carakasamhitā*.

The order of the chapters, however, seems rather arbitrary at places, due to the disorderly condition of the MS.⁸

Preserved, completely or partly, are the following chapters: Sūtrasthāna 4–23 and 25–28; Nidānasthāna 2–8; Vimānasthāna 1 and 3–6; Śārīrasthāna 2–8; Indriyasthāna 1–12; Cikitsāsthāna 1–28; Kalpasthāna 1 and 3–9; Siddhisthāna 1–2 and 4–8. Completely or almost completely extant are Sūtrasthāna 5–19, 22–23 and 25–27; Nidānasthāna 3–5 and 8; Vimānasthāna 4; Śārīrasthāna 3–7; Indriyasthāna 4–12; Cikitsāsthāna 1–2, 8, 17, 25–26 and 28; Kalpasthāna 3–6 and 8; Siddhisthāna 4–7.

The *Bhelasamhitā* is more concise than the *Carakasamhitā* and uses simpler language. The verses are in śloka and anuṣṭubh metre and rather monotonous by presenting many repetitions of the same pattern.⁹ Prose passages are found only in Śārīrasthāna 4–8.¹⁰ The Sanskrit text is rather often grammatically incorrect.¹¹

The chapters of the *Bhelasamhitā* usually begin in the same way as in the

Carakasamhitā, but they end differently, with the words *ity āha bhagavān Ātreyaḥ*. Unlike the *Caraka-* and *Suśrutasaṃhitā*, the work has not been revised by some later author. The preserved version, however, differs from an earlier text that once must have been current.

The treatise is called after Bhela or Bheḍa,¹² one of the six pupils of Ātreya Punarvasu.¹³ Each of these pupils composed, according to the story related in the *Carakasamhitā*,¹⁴ a medical treatise, based on the words of their teacher.¹⁵

The *Bhelasamhitā* is basically in the form of a dialogue between Ātreya as a teacher and Bhela as a student. The former is also designat

vasu Ātreya (Śā.4.2),¹⁶ Cāndrabhāga (Sū.25.1), Cāndrabhāga Punarvasu (Sū.18.1),¹⁷ and Kṛṣṇātreya (Sū.16.1; Śā.3.9; I.1.14).¹⁸ However, Bhela is not the only person receiving instruction from Ātreya. In the chapter on the detection of poison in food (Sū. 18) it is the royal sage (rājarṣi) Nagnajit¹⁹ who asks Ātreya questions during the latter's stay in the country of Gāndhāra. Gurdālu Bhekin²⁰ is desirous of information on medical topography (Sū.13), while Suśrotar Medhāvin,²¹ who puts forward his own opinions on the treatment of disorders of the doṣas, is instructed by Ātreya in this subject (Sū.25).

In a way similar to what is found in the *Caraka-* and *Suśrutasaṃhitā*, the *Bhelasamhitā* presents accounts of discussions among sages on important topics. Subjects of these discussions, which are less elaborate and smaller in number than in the *Carakasamhitā*, are the number of the tastes (Sū.12) and embryology (Śā.4). The persons taking part in the deliberations on the tastes are Ātreya, Khaṇḍakāpya, Maitreya, and a number of other sages.²² In both *Bhela-* and *Carakasamhitā* the meeting takes place in the Caitraratha forest. In contrast with the *Carakasamhitā*, the *Bhelasamhitā* does not attribute the views expounded to particular individuals. Nevertheless, as in the *Carakasamhitā*, seven different opinions are referred to, which are finally rejected by Ātreya, who proclaims the correct doctrine on the tastes.

The theories refuted by Ātreya claim that the tastes are one, two, three, four, five, six, or seven in number. The report in the *Bhelasamhitā* differs in some details from the one found in the *Carakasamhitā*.²³

The discussion on the question which part of the embryo develops first is also found in the *Caraka-* and *Suśrutasaṃhitā*.²⁴ The account of the *Suśrutasaṃhitā* disagrees with the versions of *Bhela-* and *Carakasamhitā*, which are rather similar in the composition of the assembly²⁵ and the views expressed.²⁶

(Sū.9.7),²⁷ Bhara

The Sūtrasthāna of the *Bhelasamhitā* is in its general outlines of the same character as the corresponding section of the *Carakasamhitā*, though distinctive features are present and the order of the chapters does not fully agree. Some chapters bear the same names as in the *Carakasamhitā*: Sū.6 (navegāndhāraṇīya; = Ca.Sū.7),³¹ 7 (indriyopakramaṇīya; = 8), 8 (mātrāśītiya; = 5), 14 (cikitsāprābhṛtiya; = 16), 15 (tisraṣaṇīya; = 11) 16 (vātakalākalīya; = 12), 17 (daśapraṇāyatanīya; = 29), 19 (vidhi-śoṇītiya; = 24), 20 (arthedaśamūliya; = 30: arthedaśamahāmūliya), 22 (sveda; = 14), 26 (aṣṭodariya; = 19), 27 (annapānavidhīya; = 27: annapānavidhi).³² Other chapters

correspond more or less to chapters of the *Carakasamhitā* with different names: Sū.5 (atyāśitīya) and Ca.Sū.5 (mātrāśitīya), Sū.9 (catuṣpādabhiṣagjītiya) and Ca.Sū.9 (khuḍḍākacatuṣpāda), 11 (samaśayanaparidhanīya) and Ca.Sū.28 (vividhāśitapītiya), 12 (ātreyaḥkaṇḍakāpyīya) and Ca.Sū.26 (ātreyaḥbhadrakāpyīya), 25 (ṛtuvibhāgiya) and Ca.Sū.6 (tasyāśitīya). Chapters resembling Sū.10 (āmāpradoṣīya), 13 (janapadavibhaktīya), 18 (annarakṣīya), and 23 (gāḍhapurīṣīya) are absent from the *Sūtrasthāna* of the *Carakasamhitā*.³³

The *Nidānasthāna* describes nearly the same eight major diseases as the *Nidāna* section of the *Carakasamhitā*, in a slightly different order. However, one exception should be noticed: *kāsa* has taken the place of *raktapitta*, though the latter disorder belongs to the eight diseases dealt with first in the *Cikitsāsthāna*, while chapter twenty of that section is concerned with the treatment of *kāsa*. In this regard it is very remarkable that the Tuyoq fragment of Bhela, already referred to, reads *raktapitta* instead of *kāsa* in the last lines of chapter eight of the *Nidānasthāna*, where the diseases described in that section are listed. This made Lüders³⁴ infer that the Tuyoq fragment represents a more original state of the text than the Tanjore MS.

The *Vimānasthāna* of the *Bhelasamhitā* differs considerably from the same section of the *Carakasamhitā*. Two of its chapters bear titles which are identical: Vi.1 (rasavimāna; = Ca.Vi.1) and 5 (vyādhitarūpīya; = Ca.Vi.7). The subject matter of chapter three, the title of which has not been preserved, and of chapter four (rogaprakṛtividhānīśāyā) is related to that of chapter six (rogānīka) of Caraka's *Vimānasthāna*. Chapter six (ṛtuvimāna) is concerned with seasonal regimen (ṛtucaryā), described in chapter six (tasyāśitīya) of the *Sūtrasthāna* of the *Carakasamhitā*.³⁵

Six of the eight chapters of the *Śārīrasthāna* bear names which are identical with or closely similar to those of corresponding chapters of the *Carakasamhitā*: 3 (asamānagotrīya; = Ca.Śā.2: atulyagotrīya), 4 (puruṣanicaya; = 5: puruṣavicaya), 5 (śārīranicaya; = 6: śārīravicaya), 6 (khuḍḍikā garbhāvakrāntiḥ; = 3), 7 (śārīrasamkhyā; = 7), and 8 (jātisūtrīya; = 8).

Some chapters of the *Indriyasthāna* find their counterparts in Caraka's *Indriyasthāna*: 4 (sadyomaraṇīya; = Ca.I.10), 5 (yasyaśyāvīya; = 9: yasyaśyāvanimittīya), 6 (pūrvārūpīya; = 5), 7 (indriyānīka; = 4),³⁶ 9 (gomayacūrṇa; = 12: gomayacūrṇīya), 11 (puṣpīya; = 2: puṣpitaka), and 12 (avākcitīya; = 8: avāksīrasīya).

The *Kalpasthāna* is comparable to the same section of the *Carakasamhitā*, the order of the chapters excepted.

The *Siddhisthāna* has only one chapter with a title that is also found in the *Carakasamhitā*: 7 (phalamātrāsiddhi; = Ca.Si.11).

The section that differs most from the *Carakasamhitā* is the *Cikitsāsthāna*. Chapters on *rasāyana* and *vājīkaraṇa* (Ci.1–2) are absent. Chapters one to nine correspond to chapters three to ten of Caraka's *Cikitsāsthāna*, although their order is not completely identical; moreover, the *Bhelasamhitā* devotes two chapters to the treatment of fevers.

Chapters of the *Cikitsāsthāna* of the *Bhelasamhitā* that are similar to chapters of the *Carakasamhitā* are: 10 (atisāra; Ca.Ci.19), 11 (grahāṇī; Ca.Ci.15), 13 (udara; Ca.Ci.13), 14 (ūrustambha; Ca.Ci.27), 16 (arśas; Ca.Ci.14), 17 (śvayathu; Ca.Ci.12), 20

(kāsa; Ca.Ci.18), 24 (vātavyādhi; Ca.Ci.28), 27 (vraṇa; Ca.Ci.25), and 28 (pāṇātyaya; Ca.Ci.24).

A separate chapter on kṣataksīṇa (Ca.Ci.11) does not form part of the *Bhelasamhitā*, where this disorder is merely mentioned in passing (Ci.4.73; 24.29; Si.7.50; 8.23). A separate chapter on mūtrakṛcchra (Ci.12) is absent from the *Carakasamhitā*, which deals with this disorder in the trimarmīya chapter (Ci.26). The treatment of visarpa and vātaśoṇita is described in one chapter in the *Bhelasamhitā* (Ci.15), in two chapters (Ci.21 and 29) in the *Carakasamhitā*. The *Carakasamhitā* does not present a separate chapter on udāvarta, as the *Bhelasamhitā* does (Ci.18); Caraka describes it in the trimarmīya chapter (Ci.26). The same applies to hṛdroga (Bhela Ci.19; Ca.Ci.26). The chapter of the *Bhelasamhitā* on śīroroga, kaṇaroga, kaṇṭharoga and arocaka (Ci.21) has no parallel in the *Carakasamhitā*, which deals with these diseases in a number of chapters (Sū.17 and Si.9: śīroroga; Ci.26: kaṇaroga; Sū.18.34–36: rohiṇī, the only kaṇṭharoga mentioned; Ci.26: arocaka). The *Bhelasamhitā* has a separate chapter on ajīrṇa (Ci.22), described in the chapter on grahaṇī (Ci.15) of the *Carakasamhitā*. Nidrā (sleep) and mūrchā (fainting) are the subjects of one chapter (Ci.23); the *Carakasamhitā* deals with sleep and its disorders, as well as with mūrchā, in the Sūtrasthāna (Sū.21 and 24). The subjects of the chapter on plīhan and halimaka (Ci.25) are distributed over two chapters of the *Carakasamhitā* (Ci.13, the chapter on udara, and 16, the chapter on pāṇḍuroga).³⁷ Apatantraka, the subject of a separate chapter in the *Bhelasamhitā* (Ci.26),³⁸ is discussed in the Siddhisthāna (9.14) of the *Carakasamhitā*.

Diseases discussed in the Cikitsāsthāna of the *Carakasamhitā* which are not dealt with in the corresponding section of the *Bhelasamhitā* are pāṇḍuroga (Ca.Ci.16),³⁹ hikkā and śvāsa (Ca.Ci.17),⁴⁰ chardi (Ca.Ci.20),⁴¹ tṛṣṇā (Ca.Ci.22),⁴² viṣa (Ca.Ci.23),⁴³ and yonivyāpad (Ci.30).⁴⁴

One of the chapters of the Sūtrasthāna (Sū.26: aṣṭodarīya) gives an idea of the contents of the *Bhelasamhitā* in its original, complete form. It enumerates, exactly like the corresponding chapter of the *Carakasamhitā* (Sū.19: aṣṭodarīya), the number of varieties of a long series of diseases.⁴⁵ Some diseases occurring in this list and not described in the preserved parts of the *Bhelasamhitā* are arbuda, bhagandara, ślipada, upadaṁśa, and vidradhi.

The *Bhelasamhitā* is, as already mentioned, much more concise than the *Carakasamhitā*. Characteristic of the *Carakasamhitā*, are absent from it. In spite of the large number of differences between the two works, the agreements between the treatises of Bhela and Caraka are close enough to warrant the conclusion that both belong to the Ātreya school of medicine.

Authors and works quoting from or referring to Bhela⁴⁶ are: Anantakumāra,⁴⁷ the *Ārogyāmṛtabindu*, Aruṇadatta,⁴⁸ the *Aṣṭāṅgahṛdayasamhitā*,⁴⁹ the *Aṣṭāṅgasamgraha*,⁵⁰ Bhāvamiśra,⁵¹ the *Bhesajjamañjūsāsannaya*, the Bower MS,⁵² the *Bṛhadraśarājasundara*,⁵³ the *Brhannighaṇṭurātākara*, Cakrapāṇidatta,⁵⁴ Candranandana,⁵⁵ Candrāṣa,⁵⁶ the *Carakasamhitā*,⁵⁷ Caube Kyākhūbadāsa's *Ajīrṇatimirabhāskara*, Ḍaḥaṇa,⁵⁸ Dīpacandra's *Laṅghanapathyanirṇaya*, Gaṅgādhara,⁵⁹ Gayadāsa,⁶⁰ Gopāladāsa's *Cikitsāmrta*, Gulrājśarmamiśra,⁶¹ Harṣakīrti, Hemādri,⁶² Jayaratna's *Jvara-*

parājaya, Jejjāṭa,⁶³ the *Jvaracikitsita*, the *Jvarasamuccaya*,⁶⁴ the *Kairālī* commentary on the *Aṣṭāṅgahṛdayasamhitā*,⁶⁵ Kalyāṇa's *Bālatantra*,⁶⁶ Karandikar's *Nīlānāḍīpikā*,⁶⁷ Kāśīrāma,⁶⁸ the *Kāśyapasamhitā*, the *Lakṣmaṇotsava*, Lolimbarāja,⁶⁹ the *Mādhavacikitsā*,⁷⁰ Mānakavi,⁷¹ the *Nāḍīcakra*,⁷² Nīlamegha,⁷³ Nīścalakara,⁷⁴ Nṛ-simhakavi,⁷⁵ the *Rasayogasāgara*, the *Rasendrasambhava*, Rūpanayana,⁷⁶ the *Sahasrayoga*,⁷⁷ Śivadāśasena,⁷⁸ Soḍhala,⁷⁹ the *Tantrasāra*,⁸⁰ Tisāṭa,⁸¹ Tōdara,⁸² Trimalla,⁸³ Vācaspati,⁸⁴ Vāgbhaṭa,⁸⁵ Vijayarākṣita,⁸⁶ the *Vīrasīṅghāvaloka*,⁸⁷ the *Yogarātnākara*,⁸⁸ Yogendranātha,⁸⁹ and Yogīndranāthasena.⁹⁰ Bhela is also quoted by the unknown author of the interpolated portions of Nīścalakara's *Ratnaprabhā*.⁹¹

The *Bhelasamhitā* was one of the sources of the *Ma'din al-Ṣhifā'*.⁹² Some scholars claim that Bhela's treatise was known to Ibn Sīnā.⁹³

The Tibetan tradition is acquainted with Bhela as a medical authority under the name of Gziñs-can.⁹⁴

Special features

Suppression (dhāraṇa) of the urges (vega) of pitta and kapha is described (Sū.6.5);⁹⁵ the urges of hunger, thirst and heavy breathing due to exercise are left unmentioned.⁹⁶ The drinking of water before or during a meal is advised against (Sū.6.43–44). The rule concerning the use of triphalā with every meal differs from the prescription in the *Carakasamhitā* (Sū.8.19).⁹⁷ The main properties of the mahābhūtas are slightly different (Sū.9.15cd–16).⁹⁸ The three types of digestion are characterized by three types of eructation (udgāra; Sū.10.13–14ab). The list of disorders arising from corruption of the element *rasa* disagrees with Caraka's list.⁹⁹ The same applies, to a varying degree, to the lists of disorders arising from corruption of blood, fatty tissue, bone marrow, and semen.¹⁰⁰ The *Bhelasamhitā* adds a series of disorders due to abnormalities during pregnancy.¹⁰¹ The disorders brought about by corruption of other constituents of the body, described by Caraka,¹⁰² are omitted by Bhela.

Bhela permits the combination of milk and fish, with the exception of the fish called *cilicima* (Sū.12.7–8).¹⁰³ The *janapadavibhaktīya* chapter (Sū.13), concerned with feeding habits and diseases prevalent in particular regions, has no counterpart in a separate chapter of the *Carakasamhitā*.¹⁰⁴ Rainy periods are described as dangerous and having a high incidence of disease (*janamāra*; Sū.13.8–9). The names of fever in various animals are enumerated (Sū.13.11–13). The disease called *batālikā* is known from other sources, is described as a risky ailment, requiring urgent treatment; its main symptom is the appearance of boils (*piṭakā*) in the armpits, groins, and elsewhere (Sū.13.14cd–18).¹⁰⁵ Bhela's ten abodes of *prāṇa* (*prāṇāyatana*; Sū.17.1–2) disagree with Caraka's list (Sū.29.3).¹⁰⁶ The preparation called *yavāgū* is said to be of eight types, while wholesome articles of food are twelve in number (Sū.17.6). The description of the heart (Sū.20.5–6) resembles that found in the *Suśrutasaṃhitā* (Śā.4.32). Eight types of sudation (*sveda*) are described (Sū.22),¹⁰⁷ whereas Caraka has a larger number (Sū.14). Disorders brought about by obstipation (*gāḍhapurīṣa*) are described (Sū.23.1–5), as well as disorders which occur when bile affects one of the seven bodily elements (Sū.25.25cd–29ab). Two varieties of *prṣṭharoga*¹⁰⁸ are mentioned

(Sū.26.6); their names are upakṣārin and kṣārin (Sū.26.27ab).¹⁰⁹ Six varieties of kāca, liṅganāśa and timira are mentioned, distinguished by their colours (Sū.26.1 and 9).¹¹⁰ Five causes of baldness (khālitya) and turning grey (palita) are distinguished (Sū.26.10–11).¹¹¹ Bhela acknowledges five varieties of arbuda (Sū.26.12),¹¹² mukharoga (Sū.26.13),¹¹³ bhagandara (Sū.26.14),¹¹⁴ and granthi (Sū.26.17),¹¹⁵ four varieties of abhiṣyanda and adhimantha (Sū.26.18),¹¹⁶ klaibya (Sū.26.19),¹¹⁷ eye diseases (Sū.26.20),¹¹⁸ upadaṁśa (Sū.26.21),¹¹⁹ āsrāva (Sū.26.22),¹²⁰ pipāsā (Sū.26.23),¹²¹ rohiṇikā (Sū.26.24),¹²² and arman (Sū.26.25).¹²³ Three types of alajī are mentioned (Sū.26.28ab)¹²⁴ and also three types of vidradhi (Sū.26.28ab).¹²⁵

Seven forms of sātmya are acknowledged (Sū.26.30cd–31ab), connected with one of the six tastes or all of them.¹²⁶ Seven types of ślīpāda are referred to (Sū.26.7).¹²⁷ Twenty kinds of parasites (kṛmi) are enumerated (Sū.26.31cd–33).¹²⁸

Two main categories of prameha are described: prakṛtiprabhava or sahaja, and sakṛta or janmottaraja (Ni.6.1–6).¹²⁹ A variety of unmāda caused by poison is absent, as it is from the *Carakasamhitā*.¹³⁰ The āgantuja type of unmāda does not include mental disorders caused by intense emotions, which are classified as mada, distinct from unmāda.¹³¹ The Nidāna chapter on unmāda denies that insanity may be the result of possession by supernatural beings (7.10). The Nidāna chapter on epilepsy (apasmāra) relates that an attack comes about when one or more of the doṣas seize the ten vessels located above the heart, and obstruct the pathway of the mind (Ni.8.3 and 8).¹³² A supernatural aetiology of apasmāra is rejected (Ni.8.13).¹³³

An intensely burning digestive fire (tīkṣṇāgni) is attributed to the combined action of vāta and pitta (Vi.3.5).¹³⁴ Three types of vipāka are mentioned: madhura and amla during the digestive process, kaṭu at the end of it (Vi.3.12).¹³⁵ Ten dehanibandhanas are enumerated (Vi.3.17).¹³⁶ The chapter on the constitutions (prakṛti) mentions seven cosmic constituents, also called prakṛti, consisting of avyakta, mahat and the five mahābhūtas, to which svabhāva¹³⁷ and kāla, the five senses, the five kinds of objects of the senses, and five kinds of buddhi are added (Vi.4.10–11).¹³⁸

The mental state of the parents during intercourse determines whether the child will be of a sāttvika, rājasa or tāmasa nature (Śā.3.17–20).¹³⁹

The five types of pitta are described (Śā.4.3–9).¹⁴⁰ Two kinds of ālocakapitta are distinguished: cakṣurvaiśeṣika, engaged in gross visual perception, and buddhivaiśeṣika, located between the eyebrows and engaged in subtle visual perception (Śā.4.4–5).¹⁴¹

The description of the digestive fire (kāyāgni; jāṭharāgni) mentions a somamaṇḍala (lunar disc) in the centre of the navel, having a sūryamaṇḍala (solar disc) within it, while in the centre of the latter the digestive fire is located (Śā.4.11cd–12).¹⁴² The size of the abdominal fire in various animals is said to depend on their body size (Śā.4.16–17ab).¹⁴³ The main task of a physician (kāyacikitsaka) consists of the treatment of disorders of the digestive fire (Śā.4.17cd–18ab).¹⁴⁴ The view that the heart is the first part of an embryo to develop is attributed to Parāśara (Śā.4.30).¹⁴⁵

The view that epilepsy (apasmāra) is caused by supernatural beings is categorically rejected (Śā.4.29).¹⁴⁶ Rasa is considered to be the most important bodily constituent (Śā.4.33). Twelve seats of ojas and tejas (i.e., the fiery element) are enumerated (Śā.5.

1). Four classes (yonī) of living beings are distinguished: jarāyuja (placentals), *aṇḍaja* (oviparous), *udbhijja* (germinating), and *svedaja* (engendered by moisture) (Śā.5.2).¹⁴⁷ The embryo is thought to develop out of six elements (kāya),¹⁴⁸ namely the five mahābhūtas and rasa (Śā.5.10). The puruṣa is described as *saṁdhātu*, i.e., composed of the five bhūtas, together with brahman, which is avyakta (Śā.5.11).¹⁴⁹ Seven varieties of divine (divya) and seven of human (mānuṣa) character types (kāya) are described (Śā.5.15–25).¹⁵⁰

The six layers of the skin (Śā.7.1) are identical with those of the *Carakasamhitā*.¹⁵¹ The osteological system shows some peculiarities (Śā.7.2).¹⁵²

The list of viscera (koṣṭhāṅga; Śā.7.4) omits the pakvāśaya.¹⁵³ The list of pratyāṅgas (Śā.7.5) differs from Caraka's enumeration;¹⁵⁴ the items listed are: two gulphas (ankles),¹⁵⁵ two nitambas,¹⁵⁶ two jaṅghās (legs),¹⁵⁷ two piṇḍikās (calves), two ūruṇḍikās,¹⁵⁸ two parts called sphic,¹⁵⁹ two vṛṣṇas (testicles), the śepha(s) (penis), two śaṅkhas (temples),¹⁶⁰ two vaṅkṣaṇas (groins), two kukundaras,¹⁶¹ the basti (bladder),¹⁶² the śīrṣa (head),¹⁶³ the udara (abdomen), two stanas (breasts), two bāhus (arms),¹⁶⁴ two aṅṣakas,¹⁶⁵ the cubuka (chin), two oṣṭhas (lips), two dantaveṣṭas (gums), two sṛkkaṇṭis (corners of the mouth), the tālu (palate), the galaśuṇḍikā (uvula), two kārṇas (ears), two kārṇaśaṅkulikās,¹⁶⁶ two gaṇḍas (cheeks), two akṣikūṭas,¹⁶⁷ four parts called akṣivartman (eyelids), and two akṣis (eyes). The transmigration of the ātman is discussed (Śā.7.7), as it is in the *Carakasamhitā*.¹⁶⁸ The human body is said to contain one añjali of mastiṣka and śukla.¹⁶⁹ The list of sixteen adhyātmadevatās, who preside over bodily and mental functions (Śā.7.8), disagrees with the corresponding list of the *Carakasamhitā*.¹⁷⁰ Bhela's list consists of: agni, prthivī, āpaḥ, ākāśa, vāyu,¹⁷¹ vidyut,¹⁷² Parjanya,¹⁷³ Indra, gandharva, Mṛtyu,¹⁷⁴ Āditya, Candramas,¹⁷⁵ Tvaṣṭar,¹⁷⁶ Viṣṇu,¹⁷⁷ Prajāpati, and Brahmā.

Religious elements in the treatment of fevers are mentioned (Ci.1.46–51; 2.39–41): paying homage to Vṛṣabhadhvaja, i.e., Śiva (1.46;¹⁷⁸ 2.40) and Bhūtādhipati (2.40), as well as the recitation of Vedic mantras (1.49); the exorcist (bhūtaavidya)¹⁷⁹ should employ the caṇḍakarman¹⁸⁰ characteristic of bhūtaavidyā (1.50). A series of opinions on the aetiology of irregular fevers (viśamajvara) is referred to, rejected by Bhela, who asserts that they are caused by saṁnipāta (2.1–5). These fevers are thought to corrupt bone marrow, osseous tissue and fatty tissue on the first day, muscular tissue and blood on the second day, kapha and vāta on the third day, pitta on the fourth day (Ci.2.6–7). Religious elements are mentioned again in the treatment of irregular fevers: paying homage to Acyuta, i.e., Viṣṇu (2.40), and Vṛṣabhadhvaja, i.e., Śiva (2.40), as well as measures belonging to the realm of bhūtaavidyā (2.41).

The *Bhelasamhitā* records that yakṣman or śoṣa presents either six or eleven symptoms (Ci.4.7ab).¹⁸¹ Nine incurable types of kuṣṭha, caused by one's karma, are described: puṇḍarīka, śvitra, ṛṣyajihva, kākaṇa, audumbara, śātaruṣka, carmakūṣṭha, ekakūṣṭha, and vaipāḍika, as well as nine curable types, caused by the doṣas: sidhma, vicarcikā, pāmā, dadru, kiṭika or kiṭiba, kapālakuṣṭha, sthūlāru, maṇḍala, and viṣaja (Ci.6.18cd—38).¹⁸² The chapter on the treatment of prameha (Ci.7) refers to the following varieties: ikṣumeha,¹⁸³ udakameha (also called ambu- and vārimēha),¹⁸⁴ sāndrameha,¹⁸⁵ bhasmameha,¹⁸⁶ lavaṇameha,¹⁸⁷ sikatāmeha, śuklameha, kṣārameha,

śīrameha, raktameha, nīlameha,¹⁸⁸ and hastimeha (also called gajameha).¹⁸⁹

The description of the pathogenesis of insanity (unmāda) is remarkable; the *Bhelasamhitā* regards it as a process in which the doṣas, seated in the space between palate and skull, first affect the manas, then the citta,¹⁹⁰ and finally the buddhi (Ci. 8.10–12ab). Possession (bhūtonmāda) is mentioned,¹⁹¹ but not given much attention to. The *Bhelasamhitā* seems to accept a division of labour between physicians and exorcists; the chapter on the treatment of insanity explicitly states that it is the task of physicians to prescribe drugs to patients with mental disorders, whereas the bhūtacikitsaka, the exorcist, should occupy himself with the religious treatment (Ci. 8.33).¹⁹² Less serious mental disorders, which may eventually develop into insanity, are designated by the term mada (Ci.8.12cd–18).¹⁹³

The chapter on the treatment of epilepsy (apasmāra) contains a second version, different from that in the Nidānasthāna, of the pathogenesis (saṃprāpti) of this disorder, described in the following way: when the mind (citta), due to various causes, is disturbed, the heart becomes desiccated; subsequently, vāta obstructs the bodily heat (ūṣman) and reaches the channel (nāḍī) which transports water; the person, suffering from this ailment, is oppressed by thirst, becomes confused, and develops epilepsy (Ci. 9.2–4). The involvement of bhūtas in the causation of epilepsy is not mentioned, which is no matter of surprise, because such an involvement has been rejected categorically on previous occasions.¹⁹⁴

The āma variety of diarrhoea (atīsāra) is considered to belong to the kapha type of this disease (Ci.10.11).¹⁹⁵ Varieties of diarrhoea caused by fear (bhaya) and grief (śoka) are described (Ci.10.42–43).¹⁹⁶ The chapter on diarrhoea deals with viṣūci, vilambikā and alasa (Ci.10.50–59).¹⁹⁷ It is also concerned with annavibhrama (Ci.10.60),¹⁹⁸ and, curiously, with arḍita (facial paresis), which is a vāta disease. A variety of arḍita, caused by vāta obstructed by kapha (śleṣmopastabdhārdita), is separately discussed (Ci.10².10–12ab).¹⁹⁹

The chapter on grahaṇī refers to the digestive fire as the basis of a person's life span (āyus) and the seat of the prāṇas (Ci.11.1); it enumerates the diseases to which grahaṇīdoṣa may give rise (Ci.11.9–11); the disorders of the digestive fire are also mentioned (Ci.11.12–1). The chapter on mūtrakīcchra (Ci.12) probably also dealt with mūtrāghāta and āsmarī. Special types of udara described, apart from the doṣic varieties,²⁰⁰ are dūṣyodara (Ci.13.10–15ab),²⁰¹ udakodara (Ci.13.15cd–18ab),²⁰² kṣatodara (Ci.13.18cd–21ab),²⁰³ baddhodara (Ci.13.21cd–25ab),²⁰⁴ and ²⁰⁵ The *Bhelasamhitā* fails to make mention of the special types of visarpa, caused by a combination of two doṣas (Ci.15).²⁰⁶

The chapter on śopha (Ci.17) does not describe the numerous varieties mentioned in the *Carakasamhitā* (Sū.18), but restricts itself to four doṣic types and one āgantū type.²⁰⁷ The pitta type of cough (pittakāsa; Ci.20.8–10) resembles the variety of pāṇḍuroga usually called kāmālā.²⁰⁸

The chapter on diseases of the head and ears (Ci.21) mentions the following diseases of the head: śaṅkhaka, sūryāvarta, anantavāta, ardhāvabheda, śīraḥkampa, and mūrdhaśvayathu (Ci.21.1–34);²⁰⁹ diseases of the ears referred to are: bādhirya, karṇasrāva, karṇaśūla, karṇaśvayathu, karṇavāta, karṇavedanā, krimija karṇaroga,

and raktaja kaṇaroga (Ci.21.51–77).²¹⁰ The same chapter is concerned with the treatment of arocaka (Ci.21.38cd–48) and with the origin, symptoms and treatment of galaśuṇḍī, a disease of the throat (Ci.21.49–50).²¹¹ A separate chapter, preserved fragmentarily, is devoted to sleep and fainting. This chapter describes the physiology of sleep and fainting (Ci.23.1–8), excessive sleep, and insomnia (Ci.23.9–13);²¹² it ends with some verses on mūrchā (Ci.23.14–16).²¹³

The chapter on vāta diseases (Ci.24) is incomplete. It describes the treatment of corrupted vāta, located in various constituents of the body, refers to the eighty vāta diseases, and mentions specific varieties.²¹⁴ The chapter on plīhan and halīmaka (Ci.25) distinguishes four doṣic types of plīhan, a disease already described as plīhodara in a previous chapter (Ci.13).²¹⁵

A separate chapter (Ci.26) is devoted to apatantraka and its treatment.²¹⁶ The same chapter is concerned with the aetiology, symptoms and therapy of arditā, facial paresis (Ci.26.26cd–32), a vāta disease already dealt with in a preceding chapter (Ci.10).

The chapter on the treatment of vraṇa (Ci.27) mentions twelve vraṇadoṣas (Ci.27.15)²¹⁷ and thirty-six ways of treatment (upakrama; Ci.27.16);²¹⁸ specialists in internal medicine (kāyacikitsaka) and surgery (śalyakṛt) are referred to (Ci.27.14, 16, 20).²¹⁹ The chapter on pānātyaya (Ci.28) describes four doṣic varieties²²⁰ and one specific disorder, called pānājīrṇa (Ci.28.91cd–93ab).²²¹

In contrast with the *Carakasamhitā*, the Kalpasthāna of the *Bhelasamhitā* does not enumerate the synonyms of the medicinal plants dealt with in this section.

The Siddhisthāna is differently arranged, when compared with the corresponding section of the *Carakasamhitā*. The first chapter is concerned with emetic and purgative treatments. Chapter two deals with drugs administered by way of the nostrils (nasya); four varieties are distinguished: avapiḍa, anuvāsa, dhūma, and pradhamaṇa (Si.2.1).

Chapter four describes the symptoms and treatment of ten disorders (vyāpad) brought about by the improper administration of emetics and purgatives; these ten disorders are: parisrāva, ādhmāna, vibandha, gudaniḥsrava, hr̥droga, śūla, parikartikā, jīvādāna, śīroroga, and pravāhikā.²²² Chapter five, concerned with clysters, refers to divergent opinions on this subject and Bhela's own view. Chapters six and seven are on the same subject. Chapter seven mentions disagreeing views on the best drug for use in an enema; Bhela himself maintains an eclectic position (7.2–3).²²³ Chapter eight is about the ten disorders caused by the injudicious use of enemas²²⁴ and on specific enemas.

Some interesting names of disorders, mentioned incidentally, are: āḥhyavāta (Ci.14.19),²²⁵ amlapitta (Ka.6.11),²²⁶ kacchū (Sū.11.8),²²⁷ khuḍavāta (Ci.14.19),²²⁸ nirvāhikā (Ci.16.12; Si.7.45, 48, 50),²²⁹ pārśvaroga (Sū.21.4 and 6), tapaḥsphoṭa (Sū.4.19),²³⁰ and vipāṭikā (Sū.11.8).²³¹

Many formulae and therapeutic rules find their counterparts in the *Carakasamhitā*; some recipes, absent there, recur, usually in more or less altered versions, in later treatises.²³²

Names of medicinal plants, mentioned in the *Bhelasamhitā*, but absent from the *Carakasamhitā*, are: ādaṇḍa (Ci.16.69),²³³ āraṇyapippalī (Ci.21.30),²³⁴ bhadrodumbarika (Sū.4.12 and 15),²³⁵ brahmabhūtikā (Sū.27.23), candrākaśāka (Sū.28.41),²³⁶

candravallī (Ci.26.21),²³⁷ caṭaka (Sū.27.11),²³⁸ gavādanī (Sū.4.5),²³⁹ hemavidārikā (Ci.14.12), kadambapuṣpī (Ci.26.21),²⁴⁰ kālamānaka (Sū.27.10),²⁴¹ kapila (Ci.24.23),²⁴² kaṇṇamoṭa (Ci.27.2),²⁴³ ketu (Sū.27.12),²⁴⁴ keśamāriṇī (Ci.9.6),²⁴⁵ keśavatī (Ci.26.21), kūlaka (Sū.27.12),²⁴⁶ kulīśa (Sū.4.13),²⁴⁷ kumārī (Ci.24.25), kurūṭikā (Sū.28.32),²⁴⁸ kuṭṇijaka (Sū.28.42), mācipattra (Ci.2.31), mahānimba (Ci.16.70),²⁴⁹ mahāvallī (Ci.26.17),²⁵⁰ modakī (Ci.24.27),²⁵¹ mikuṇṇikā (Si.7.7),²⁵² nīrakadambaka (Ci.24.25),²⁵³ pāribhadaka (Ci.8.24; 28.86),²⁵⁴ puṣkaravartaka (Sū.28.31),²⁵⁵ pūtanā (Ci.2.35; 9.6),²⁵⁶ rājatrṇa (Si.7.14),²⁵⁷ rubūka (Ci.21.68; Si.4.32),²⁵⁸ rūpasthā (Ci.9.6), samudrāntā (Ci.15.22; 27.5 and 8),²⁵⁹ śītikā (Sū.28.32), śukānanā (Ci.6.68; Si.1.16),²⁶⁰ śukanāsā (Ci.26.17; 27.3),²⁶¹ sūkārī (Ci.2.35),²⁶² suvarṇapuṣpī (Sū.4.4),²⁶³ svādukaṇṭaka (Vi.5.6),²⁶⁴ takkola (Ci.24.8),²⁶⁵ turāṅgī (Si.7.14),²⁶⁶ vadhūṭikā (Si.8.41),²⁶⁷ and veṇucchattrāka²⁶⁸ (Sū.28.26).²⁶⁹

Some plant names which are characteristic of the *Carakasamhitā* are also found in the *Bhelasamhitā*: avākuṣpī (Ci.1.6.40), bhaṇḍī (Si.4.22), cāraṭī (Ci.2.35), jayā (Ci.2.34), kāyasthā (Ci.2.34; 24.26), kuṇṇikā (Ci.13.27), nalikā (Ci.24.8), parṇāsa (Sū.27.10), pīlupamī (Ci.14.13), poṭagala (Ka.3.7), rohiṣa (Ci.24.24; Ka.4.2; 5.2; 9.1; Si.7.14), śilodbheda (Ci.1.0.31), śuṣkaśāka (Sū.10.1), svarṇayūthikā (Ci.16.79; 27.8), and vīrā (Ci.2.34; 24.25).

The author

No particulars are known about Bhela.

A number of peculiarities of the vegetable materia medica prompted R.S. Singh to assert that Bhela was a resident of Western India.²⁷⁰ Others are of the opinion that Bhela belonged to the region of Gandhāra,²⁷¹ because that country is mentioned in his treatise.²⁷²

Date

Bhela is often quoted by later authors, but, as only a minority among the quotations can be traced in the preserved text of the *Bhelasamhitā*,²⁷³ the majority are unsuitable for the purpose of elucidating its chronological position.

Ananta's *Yogaratanasamuccaya*, a treatise that is probably posterior to the fifteenth century, contains a rather large number of quotations from Bhela; some of these, or related verses, are found in the Tanjore MS.²⁷⁴

Narahari gives, in his *Vāgbhaṭamaṇḍana*, a quotation found in Bhela's *Vimānasthāna*.²⁷⁵

Nīśalākara's *Ratnaprabhā* ascribes a number of prescriptions of the *Cakradatta* to Bhela.²⁷⁶ Two of these form part of the text of the *Bhelasamhitā*.²⁷⁷ Eight quotations from Bhela in the *Ratnaprabhā* are found in the *Bhelasamhitā*.²⁷⁸

Soḍhala's *Gadanigraha* ascribes the formula of dhānvantaragṛta²⁷⁹ to Bhela; this recipe itself is not found in the Tanjore MS of the *Bhelasamhitā*, but is referred to twice (Ci.6.50 and 15.39), which proves that it formed part of the complete text, still known to Soḍhala about A.D. 1200.²⁸⁰

One of Aruṇadatta's quotations²⁸¹ establishes that the *Bhelasamhitā* was known in the twelfth century. Two or three citations from Bhela's work in a monograph on fevers by an unknown author, the *Jvarasamuccaya*, are said to agree with the text of the Tanjore MS, while the majority are not found in the latter.²⁸² The oldest MS of this *Jvarasamuccaya* dates from A.D. 924,²⁸³ which establishes that the verses ascribed to Bhela are taken from a version of his work that antedates the tenth century.

Tisāṭa's *Cikitsākalikā* contains a recipe ascribed to Bhela (248: hīṅupaṇcaka) that, although differently worded, is very close to the formula of the same name in the *Bhelasamhitā* (Ci.19.10), which indicates that the text consulted by Tisāṭa in the tenth century was not altogether different from the one known to us.

Ṭoḍāra's *Āyurvedasaukhya* contains a quotation that is partly found in the *Bhelasamhitā*.²⁸⁴

Vijayarakṣita's quotation is very close to a verse actually found in the *Bhelasamhitā*.²⁸⁵

The Bower MS describes three gruels (yavāgū) attributed to Bhela.²⁸⁶ Eleven more prescriptions found in it²⁸⁷ form also part of the text of the *Bhelasamhitā*, without being associated with his name in the Bower MS. These recipes need not be taken from the *Bhelasamhitā*, as A.F.R. Hoernle claimed,²⁸⁸ who was convinced that the *Nāvanīṭaka* of the Bower MS is posterior to the *Bhelasamhitā*. They may well be from the floating medical tradition or from early treatises now lost.²⁸⁹

The attribution of some gruels to Bhela in the Bower MS indicates that he was regarded as a medical authority in early times, as is also apparent from the references to him as one of the six pupils of Punarvasu Ātreya who wrote their own textbooks on internal medicine (kāyacikitsā).²⁹⁰ The *Bhelasamhitā* itself shows unequivocally that Bhela belongs to the tradition connected with Ātreya and his special branch of medicine. A close study of the text of Bhela's treatise, as known to us, betrays, however, that it repeatedly departs from the tradition embodied in the *Carakasamhitā*²⁹¹ and even presents a not inconsiderable number of affinities with the teachings of the school of Dhanvantari, illustrated by the *Suśrutasaṃhitā*.²⁹² A smaller number of details show similarities with the *Kāśyapasaṃhitā*.²⁹³

Data proving that a *Bhelasamhitā* related to the treatise in the Tanjore MS was known in the period of Vāgbhaṭa are found in the *Aṣṭāṅgaḥṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*. The *Aṣṭāṅgaḥṛdayasaṃhitā* refers to Bhela's formula of saḥacarataila,²⁹⁴ the *Aṣṭāṅgasamgraha* to Bhela's kṣārāgāda²⁹⁵ and saḥacarataila.²⁹⁶

A collection of formulae called *Jivakapustaka* contains a formula (Nr. 8), also found in the *Bhelasamhitā* (Ci.5.17–19). Bhela may be mentioned in an old Khotanese fragment of a Buddhist text.²⁹⁷

References to Bhela in other works that conflict with what is found in the text of the *Bhelasamhitā* are also known. Bhela's opinion on the application of clysters (basti) in children, as recorded in the *Kāśyapasaṃhitā*, disagrees with the view on this subject laid down in the *Bhelasamhitā*.²⁹⁸

The evidence collected from the references to and quotations from Bhela makes clear that the treatise fragmentarily preserved in the Tanjore MS is not completely identical with the work quoted.²⁹⁹ The chronological position of the preserved *Bhelasam-*

hitā can for that reason be determined only by means of internal evidence and the date of completion of its MS, about A.D. 1650.

The structure of the *Bhelasamhitā*, in particular the similarity of this structure to that of the *Carakasamhitā*, the partial identity of the titles of the chapters and their contents, the contents of the *Kalpasthāna*, etc., make it seem plausible to assume that the work is later than the *Carakasamhitā* after its redaction by *Dr̥ḍhabala* or of about the same date. The affinities with the *Suśrutasamhitā* make it improbable that *Bhela*'s treatise is much earlier. Influences from the side of *Vāgbhaṭa*'s works or *Mādhava*'s *Rugviniścaya* are absent. The period between A.D. 400 and 750 may therefore have witnessed the development of an earlier text into the treatise known from the Tanjore MS.

Clues to the period in which the work acquired its present shape were collected by P.V. Sharma.³⁰⁰ Changes in matters pertaining to religion are perceptible when the *Caraka*- and *Bhelasamhitā* are compared. Both Śaivism and Vaiṣṇavism are represented in the latter;³⁰¹ whereas the former shows an emphasis on Vaiṣṇavism. Practices that became current in the Gupta age are alluded to; examples are Śiva worship on a cremation ground (Ci.2.40) and the practice of *caṇḍakarman* (Ci.1.50). Several types of ascetics are mentioned: *kaṣāyavastra*, *muṇḍa*, *jaṭila*, and *nagnaka* (I.8.14) and *mlecchas* are referred to (Sū.5.25). Tantric influences are also detectable: the heart is compared with a wheel (*cakra*) on which the *prāṇas* are fixed (Sū.20.4), a solar and lunar disc are thought to be located in the umbilical region (Śā.4.11–12), etc.

The evidence taken together points to a period after *Vāgbhaṭa*, about the seventh century or somewhat later, as the age that saw the completion of the text of the *Bhelasamhitā* represented by the Tanjore MS.³⁰²

Chapter 3

Kāśyapasaṃhitā

The *Kāśyapasaṃhitā*¹ is the only specialized textbook on *kaumārabṛṣṭya* that has been preserved. Two MSS of this work are known. The first of these was discovered by Haraprasād Śāstrī in Kāthmāndū in 1898;² the MS consists of only thirty-eight palm leaves and contains a very small portion of the text.³ The second MS, much more extensive, although incomplete and damaged as well, was acquired by Pan̄dit Hemrāj Śarmā.⁴ The editions of the *Kāśyapasaṃhitā* are based on this second MS.⁵

Contents

The *Kāśyapasaṃhitā* is composed in the form of a dialogue between Kāśyapa as the teacher and Vṛddhajīvaka as his pupil. Some of the colophons refer to the treatise as *Vṛddhajīvakiya Kaumārabṛṣṭya* (92 and 146), *Vṛddhajīvakiya Tantra* (227), *Vṛddhakāśyapiya Saṃhitā* (324), and *Bhārgavīya Saṃhitā* (331).⁶

A story about the transmission of the teachings embodied in the *Kāśyapasaṃhitā* is told in the last chapter of the *Kalpasthāna* (226–227): “The great sage Kāśyapa composed, for the benefit of mankind and by order of Brahmā, by the force of his austerities and seeing it with the eye of knowledge, a treatise, which was bestowed on the sages. Jīvaka, the son of R̥cika,⁷ free from ignorance and pure, the first to understand this great treatise, made a condensed version of it. The sages, however, disapproved of the words of this child (i.e., Jīvaka). Thereupon the pure Jīvaka, only five years old, plunged into the Gaṅgā at Kanakhala,⁸ to emerge again in a moment, full of wrinkles and with grey hair. Astonished on witnessing this miracle, the sages gave him the name of Vṛddhajīvaka, accepted his treatise, and regarded him as the foremost among the physicians. When this treatise got lost during the Kali age, the yakṣa Anāyāsa⁹ preserved it, intent on the welfare of mankind. Afterwards, the learned Vātsya, who was of Vṛddhajīvaka’s lineage, obtained this great treatise, after propitiating Anāyāsa. After a complete study of the three Vedas, the *R̥g-*, *Yājur-* and *Sāmaveda*, together with their auxiliary works (*vedāṅga*), and after appeasing Śiva, Kāśyapa and the yakṣas with austerities and devotions, he revised the treatise composed by Vṛddhajīvaka for the prosperity of mankind, in order to acquire merit, fame, and happiness.”

This story indicates that the text of the *Kāśyapasaṃhitā* is actually the revision by Vātsya of an earlier treatise. The attribution of the *Kāśyapasaṃhitā* to Kāśyapa does not explain its name, since *Kāśyapasaṃhitā* would have been more in conformity with usage.¹⁰ The Kāśyapa of the *Kāśyapasaṃhitā* is sometimes designated as Mārīca (183 and 202)¹¹ and Prajāpati (39; 79; 93; 123; 174; 185; 286);¹² he is once referred to as

Kāśirāja (363). Vṛddhajīvaka is referred to as Bhārgava (74; 75; 117; 214; 227; 240; 331) and, rather often, as Vṛddha, Sthavira or Sthavirajīvaka. The name Vṛddhajīvaka and the story about him refer to kaumārābhṛtya as the special subject of the treatise, because the first one to grasp this branch of āyurveda is depicted as a wise child. The name recalls that of the paediatrician Jīvaka, quoted in the Bower MS, and the Jīvaka of Buddhist literature.

The *Kāśyapasaṃhitā* mentions, apart from the persons already referred to, a number of ancientsages and authorities who for the greater part are met with in other medical treatises. Their names are: Ātreya Punarvasu (147), Bhārgava Pramati (39), Bhela (147), Dāruvāha (33 and 39), Gārgya (147), Hiraṇyākṣa (39), Kāṅkāyana (39), Kautsa (152), Kṛṣṇa Bhāradvāja (39), Māthara (147), Pārāśarya (147 and 152), Vaideha Janaka (153), Vaideha Nimi (39), Vāryovida (39, 153, 324), and Vṛddhakāśyapa (153).

Most of these authorities appear on the scene on the occasion of discussions touching on controversial subjects. These discussions, resembling those recorded in the *Bhela*-, *Caraka*- and *Suśrutasaṃhitā*, are three in number. The first one (39; Sū.27.3) is about the numbers of diseases to be distinguished. The following views are enunciated: all diseases, being associated with pain, are one (Bhārgava Pramati);¹³ diseases are twofold: *nija* and *āgantū* (Vāryovida);¹⁴ diseases are threefold: curable, amenable to palliative treatment, and incurable (Kāṅkāyana);¹⁵ diseases are fourfold: *āgantū*, and caused by one of the three *doṣas* (Kṛṣṇa Bhāradvāja);¹⁶ diseases are fivefold: *āgantū*, caused by one of the three *doṣas*, or caused by all three *doṣas* together (the royal sage Dāruvāha);¹⁷ diseases are sixfold, because foods and drinks have six tastes;¹⁸ diseases are of seven kinds: caused by one of the three *doṣas*, by a combination of two *doṣas*, or by all three together (Hiraṇyākṣa);¹⁹ diseases are of eight types: caused by one, two, or three *doṣas*, and of *āgantū* origin (Vaideha Nimi);²⁰ diseases are of innumerable varieties, because the *doṣas* involved may be balanced, present in excess, or deficient (Vṛddhajīvaka).²¹ Kaśyapa declares, as Vāryovida did, that diseases are either *nija* or *āgantū*, but adding that both categories consist of many varieties.

The second discussion, fragmentarily preserved, is concerned with the treatment of children by means of enemas (146–147; Si.1). Gārgya²² advances that an enema (*basti*) may be applied in all children, even immediately after birth; Māthara,²³ disagreeing, holds that an enema should not be administered in the first month after birth; Ātreya Punarvasu declares that the first three months of life are unsuitable; the view that one year should have elapsed is expressed by an authority whose name has not been preserved; Pārāśarya²⁴ is convinced that a child may profit from a *basti* when it is three years old; Bhela moves this limit to six years. Kaśyapa decides that enemas are applicable when a child is no longer breastfed and has become used to solid food.

The third discussion has the treatment with emetics for its subject (152–153; Si.3). Kautsa²⁵ distinguishes three grades in this treatment; Pārāśarya, apparently agreeing with him, adds that these three grades ought to be related to a patient's strength. The diet after the administration of an emetic is also dealt with; Vṛddhakāśyapa,²⁶ Vaideha Janaka,²⁷ and others, whose names are not extant, give their opinion. Some related subjects are touched upon by Vāryovida and Vātsya.²⁸ Kaśyapa, appearing again at the

end, expounds his thoughts, which should be regarded as final.

Dāruvāha (33;Sū.25.3–4) is mentioned once as the one who urges Vṛddhajīvaka on to put questions to Kāśyapa on the diagnosis of young children who are not yet able to speak.

Someone, several times addressed as king in the *Kāśyapasaṃhitā*,²⁹ and apparently desirous of instruction by Kāśyapa, may be Vāryovida,³⁰ who is called a king in some verses dealing with drug treatment in children.³¹

The structure of the *Kāśyapasaṃhitā* resembles that of the *Caraka-* and *Bhelasamhitā*. The chapters begin with an announcement of Kāśyapa, who mentions the title of the chapter that he is going to expound. In many cases, it is Vṛddhajīvaka who puts questions to Kāśyapa, who, surrounded by other sages,³² gives his answers.

The internal arrangement of the *Kāśyapasaṃhitā* was originally the same as that of the *Caraka-* and *Bhelasamhitā* in containing a total of 120 chapters, distributed over eight sections with respectively thirty (Sūtrasthāna), eight (Nidānasthāna), eight (Vimānasthāna), eight (Śārīrasthāna), twelve (Indriyasthāna), thirty (Cikitsasthāna), twelve (Siddhisthāna), and twelve (Kalpasthāna) chapters. The order of the last two sections is peculiar to the *Kāśyapasaṃhitā*, for the Kalpasthāna precedes the Siddhisthāna in both *Caraka-* and *Bhelasamhitā*. The verses providing this information on the sections and number of chapters of each section, found in the last chapter of the Kalpasthāna,³³ add that the supplementary section, the Khilasthāna, which distinguishes the *Kāśyapasaṃhitā* from the *Caraka-* and *Bhelasamhitā*, originally consisted of eighty chapters.

Out of the total number of 200 chapters, the Khilasthāna included, seventy-eight have been preserved, partially (forty-seven chapters) or completely (thirty-one chapters): eleven from the Sūtrasthāna, two from the Vimānasthāna, five from the Śārīrasthāna, one from the Indriyasthāna, eighteen from the Cikitsasthāna, eight from the Siddhisthāna, nine from the Kalpasthāna, and twenty-four from the Khilasthāna. The Nidānasthāna is completely absent from the MS.³⁴

The *Kāśyapasaṃhitā* is written in a mixture of verse and prose. Verse prevails over prose in general; the Vimāna- and Śārīrasthāna are, as in the *Carakasamhitā*, mainly in prose, as are some stray chapters, such as the Revatīkalpa and chapter fifteen of the Khilasthāna; the single extant chapter from the Indriyasthāna is in verse.

The work has many elements in common with the *saṃhitās* of Caraka and Bhela, but differs in several respects, being chiefly concerned with kaumārabhṛtya, which is, accordingly, said to be the foremost among the eight divisions of āyurveda (61).³⁵

The extant chapters of the Sūtrasthāna describe the treatment with linctuses (leḥā-dhyāya; 1–6);³⁶ disorders associated with breast-feeding (Sū.19: kṣīrotpatti; 6–10);³⁷ dentition (Sū.20: dantajanmikādhya; 10–14);³⁸ piercing of the earlobes (Sū.21: cūḍākaraṇyādhya; 14–16);³⁹ treatment with oils (Sū.22: sneha; 16–24);⁴⁰ sudation (Sū.23: sveda; 24–29);⁴¹ arrangements concerning equipment (Sū.24: upakalpanīya; 29–33);⁴² diagnosis in young children not yet able to speak (Sū.25: vedanādhya; 33–37);⁴³ the four pillars of treatment (Sū.26: cikitsāsāmpadīya; 37–39);⁴⁴ the classification of diseases and the enumeration of the disorders caused by vāta, pitta, kapha, and blood (Sū.27: rogādhya; 39–47);⁴⁵ auspicious and inauspicious bodily

marks,⁴⁶ and the sattva typology (Sū.28: lakṣaṇādhyāya; 47–54).⁴⁷

The extant chapters of the Vimānasthāna are about an imperfectly known subject⁴⁸ and about the initiation of students (śiṣyopakramaṇīya; 57–65).⁴⁹

The extant chapters of the Śārīrasthāna are concerned with anatomy, elements of Sāṃkhya philosophy, and other subjects (65–69);⁵⁰ pregnancy (asamānagotrīya; 69–72);⁵¹ embryology (garbhāvakrānti; 72–74);⁵² anatomy (śārīravacaya; 75–79);⁵³ procreation (jātisūtrīya; 79–88).⁵⁴

The subjects dealt with in the single extant chapter of the Indriyasthāna (oṣadhabheṣajīya; 89–92) are partly the same as those found in some chapters of Caraka's Indriyasthāna,⁵⁵ partly absent from the latter.⁵⁶

The extant chapters of the Cikitsasthāna deal with fevers (jvara; 93–95);⁵⁷ diseases of pregnant women (garbhinīcikitsita; 95–97);⁵⁸ puerperal diseases (duṣprajāta-cikitsita; 97–98); disorders caused by bālagrahas (98–105); plīhan and halīmaka (105–106);⁵⁹ udāvarta (106–108);⁶⁰ rājayakṣman (109–111);⁶¹ gulma (111–115);⁶² kuṣṭha (115–119);⁶³ mūtrakṛcchra (120–122);⁶⁴ wounds and ulcers (dvivraṇīya; 123–130);⁶⁵ pratiśyāya (130–132);⁶⁶ urogṛhāta (132–133); śopha (133–134);⁶⁷ kṛmi (134–135);⁶⁸ madātyaya (135–139);⁶⁹ phakka (139–142); disorders in wet-nurses (dhātrīcikitsita; 142–146).⁷⁰

The extant chapters of the Siddhisthāna⁷¹ are called: (1) rājaputrīyā (146–149; on the application of enemas in children); (2) trilakṣaṇā (149–152; on the right and wrong ways of administering pañcakarma);⁷² (3) vamanavirecanīyā (152–159; on emesis and purgation);⁷³ (4) nastahkarmīyā (159–161; on nasal therapy);⁷⁴ (5) kriyāsiddhi (162–163; rules for patients during treatment);⁷⁵ (6) bastikarmīyā (164–165; on wrong ways of administering enemas);⁷⁶ (7) pañcakarmīyā (165–168; on indications and contra-indications);⁷⁷ (8) maṅgalasiddhi (168–169; recipes for efficient enemas).

The Kalpasthāna differs considerably from the corresponding section of the Caraka- and Bhelaśaṃhitā. The nine chapters which are extant are concerned with: (1) fumigations (dhūpa; 170–174); (2) laṣṇakalpa (174–181); (3) kaṭutailakalpa (181–183); (4) ṣaṭkalpa (183–185); (5) śatapuspāśatāvarīkalpa (185–187); (6) revatīkalpa (187–202); (7) bhojanakalpa (202–213); (8) viśeṣakalpa (213–225); (9) saṃhitākalpa (225–227).

The Khilasthāna⁷⁸ is of a mixed character; it contains chapters on the aetiology, symptomatology and treatment, or treatment only, of particular diseases, some of which have already been dealt with in previous chapters; chapters on subjects with a more general bearing are also found in it.

The Khilasthāna may be due to Vātsya, who added it as a supplement to the *Vṛddhajīvakiyatantra* after revising the latter.⁷⁹ It has been given the same structure as the preceding sections. The supplementary character appears undisguisedly in the first verses of its first chapter, where Vṛddhajīvaka approaches Kaśyapa and asks him to elucidate the causes of irregular fevers, reminding him that he failed to discuss this subject in the chapter on the treatment of fevers.⁸⁰

The subjects of the extant chapters of the Khilasthāna are: (1) irregular fevers (viṣamajvaranirdeśīya; 227–234); (2) the treatment of fevers in general (viśeṣanirdeśīya; 234–240); (3) principles of treatment (bhaiṣajyopakramaṇīya; 240–249); (4)

soups (yūṣanirdeśīya; 249–255); (5) diet and related subjects (bhojyopakramaṇīya; 255–260); (6) the doṣas, the tastes, and their combinations (rasadoṣavibhāgīya; 261–268); (7) purificatory treatments (saṃsuddhiviśeṣaṇīya; 268–277); (8) the treatment with enemas (bastiviśeṣaṇīya; 277–286); (9) the aetiology, symptomatology and treatment of raktagulma (raktagulmavinīścaya; 286–292); (10) the treatment of diseases in pregnant women (antarvatnīcikitsita; 293–304); (11) the treatment of puerperal diseases (sūtikopakramaṇīya; 304–316); (12) the treatment of infants (jātakarmottara; 316–319); (13) the aetiology, symptomatology and treatment of kukkuṇaka (kukkuṇakacikitsita; 319–324); (14) the aetiology, symptomatology and treatment of visarpa (visarpacikitsita; 324–331); (15) the aetiology, symptomatology and treatment of carmadala (carmadalacikitsita; 331–335); (16) the aetiology, symptomatology and treatment of amlapitta (amlapittacikitsita; 335–339); (17) the aetiology, symptomatology and treatment of swellings (śothacikitsita; 339–345); (18) the aetiology, symptomatology and treatment of śūla (śūlacikitsita; 345–349); (19) supplementary prescriptions concerning the treatment of the eight types of fever (aṣṭajavaracikitsitottara; 349–353); (21) treatments with honey (madhuviśeṣaṇīya; 353–354); (22) the medicinal properties of milk (kṣīraguṇaviśeṣīya; 354–356); (23) the medicinal properties of water (pāṇiyaguṇaviśeṣīya; 356–359); (24) the medicinal properties of meat (māṃsaguṇaviśeṣīya; 359–363); (25) the feeding habits of the inhabitants of various countries (deśasātmīya; 363–364).

The text of the *Kāśyapaśaṃhitā* repeatedly refers to its various sections and subjects dealt with there;⁸¹ the name of a particular chapter is rarely mentioned.⁸²

The author of the treatise or its revisor, Vātsya, was well acquainted with differences of opinion among medical authorities, as shown, apart from the discussions already described, by a rather large number of passages where dissentient points of view are taken into consideration or merely registered.⁸³ On some occasions Kāśyapa's own opinion, always regarded as decisive, is clearly stated.⁸⁴ On one of these, he appears to reject a view expressed in the *Carakaśaṃhitā*.⁸⁵

Medical schools specializing in other branches of medicine than *kaumārabhṛtya* are referred to.⁸⁶

Quotations⁸⁷

An anonymous monograph on fevers, called *Jvarasamuccaya*, contains a considerable number of verses, attributed to Kāśyapa, which form part of the *Kāśyapaśaṃhitā*.⁸⁸ The corresponding verses are not only found in those sections of the *Kāśyapaśaṃhitā* which are old or at least based on an older version, but also in the *Khilasthāna*. The stanzas that cannot be traced can without much hesitation be supposed to belong to Vātsya's revised version of the *Kāśyapaśaṃhitā*.

Some verses, quoted from the *Bhālūkītantra* in the *Madhukośa* ad *Mādhavanidāna* 2.18–23 are found in the *viśeṣakalpādhya*ya of the *Kāśyapaśaṃhitā*.⁸⁹ The verses describing the two *saṇṇipāta* fevers called *vidhu* and *phalgu* (*viśeṣakalpa* 28cd–31ab) recur, without mention of a source, in *Vaṅgasena's Cilitsāsārasaṃgraha* (jvara 354–356) and *Bhāvamiśra's Bhāvaprakāśa* (cikitsā 1.459–461). Another stanza, said to be

from Bhāluki in the *Ātañkadarpaṇa* ad *Mādhavanidāna* 2.24, forms part of the viśe-
ṣakalpa chapter as well (218).⁹⁰

The recipes of the pills against children's diseases, attributed to Kāśyapa in the Bower MS (II.1010–1040), are supposed to have been taken from Khilasthāna 17 and 18 of the *Kāśyapasamhitā* by V.N. Pandey and A. Pandey,⁹¹ but cannot be traced in these chapters.

The *Kāśyapasamhitā* is quoted in Dharmadatta's *Tridoṣasaṃgraha*.

R.C. Majumdar's claim⁹² that the *Kāśyapasamhitā* is quoted in the Bower MS and contains many quotations, not found elsewhere, from the most ancient works of the Ātreya school, is entirely unfounded.

Special features⁹³

The rasa derived from the food is, in a pregnant woman, divided into three portions, which nourish the unborn child, the mother's body and the mother's breasts (2; 287: Khila 9.20).⁹⁴ A child whose own mother has died and who is being cared for by a stepmother is called kalyāṇamātrka (4). Disorders of the breastmilk are attributed to demonic influences, in conjunction with the doṣas (6; Sū.19).⁹⁵ The group of drugs which purify the breastmilk (kṛtaviśodhana; 7) is closely related to the same group of the *Carakasamhitā* (Śā.8.56). Foreign bodies in the food or drink of the mother or wet-nurse are called vajra⁹⁶ and give rise to a disease called stanakṛlaka (9–10).⁹⁷ Mothers whose fine breasts are injured by the jealous glances of other women are advised to take recourse to Tantric practices (10: tantrāvacāraṇa).

Chapter twenty of the *Sūtrasthāna* (10–14)⁹⁸ describes the human set of teeth, both milk teeth and second teeth; the central incisors (rājadanta), lateral incisors (basta), canine teeth (daṇṣṭrā), and (pre)molars (hānavya) are separately mentioned.⁹⁹ The same chapter describes normal and abnormal teething. Particular rituals should be performed when abnormalities are observed.¹⁰⁰ Four characteristics of the set of teeth are said to have an auspicious or inauspicious meaning.¹⁰¹ Piercing of the ears (karṇavedha) is described (15; Sū.21).¹⁰²

The effects of the four fatty substances on the doṣas (16–17; Sū.22) differ to a certain extent from the views expressed in the *Caraka-* and *Suśrutasaṃhitā*;¹⁰³ the anupānas to be used after the ingestion of a fatty substance are the same as those mentioned in the *Carakasamhitā*.¹⁰⁴

Eight types of sudation (sveda) are described (26–29; Sū.23): hastasveda, pradeha, nāḍīsveda, prastarasveda, saṅkarasveda, upanāha, avagāha, and pariṣeka.¹⁰⁵ The term trikathoraka,¹⁰⁶ employed in the verses on saṅkarasveda (28), may refer to the sand (sikātā), dust (pāṇṣu) and pebbles (pāṣāṇa) of Caraka's piṇḍasveda (Sū.14.26), though the term itself does not occur in its description.

Four varieties of ajṛṇa are distinguished: āma, vidagdha, saśleṣman and rasaśeṣa (32; Sū.24).¹⁰⁷ Viśucikā and alasaka are described as related disorders (35; Sū.25.27–28), in the same way as in the *Carakasamhitā* (Vi.2.10–12). Separate disorders, characterized in the same chapter (35; Sū.25.30–33), are śuṣkakaṇṭhū¹⁰⁸ and āma.¹⁰⁹ Madātyaya as a disease occurring in children (36; Sū.25.36) is different from the madātyaya

or pānātaya in adults, which comprises disorders resulting from the abuse of alcoholic drinks.

The *Kāśyapaśaṃhitā* recommends treating mental disorders in the same way as bodily diseases (39; Sū.27.5). A term used to designate the doṣas is dhātusthūṇā (40; Sū.27.6). The two main categories of disease, niḥa and āgantu (40; Sū.27.8–9), are defined as in the *Carakaśaṃhitā* (Sū.20.4), but the *Kāśyapaśaṃhitā* mentions, as belonging to the category āgantu, afflictions which are adhīdevata, a term akin to the ādhīdaivika category of the *Suśrutasaṃhitā* (Sū.24).

The eighty vāta, forty pitta and twenty kapha disorders (41–44; Sū.27.19–43) are largely identical with those enumerated in the *Carakaśaṃhitā* (Sū.20.10–17).¹¹⁰ The *Kāśyapa-* (45; Sū.27.49–56) and *Carakaśaṃhitā* (Sū.19.3) also agree on the number of varieties of each disease to be distinguished.

Blood and pitta are said to be related to each other, but a separate list of diseases caused by corrupted blood is presented (46; Sū.27.63–64).¹¹¹ The list of auspicious and inauspicious bodily signs in children (47–48; Sū.28.6) is more detailed than in the *Carakaśaṃhitā* (Śā.8.51).¹¹²

The sattva typology of the *Kāśyapaśaṃhitā* (51–54) differs to some extent from this typology as described in the *Carakaśaṃhitā* (Śā.4.37–39).¹¹³ It adds a prājāpatya type to the śuddha group and replaces the praita sattva by two types, called bhūta and yākṣa. Nine sāra types are mentioned; the ninth type, added to the eight of the *Carakaśaṃhitā* (Vi.8.102–114), is called ojaśśāra (54).

The Vimānasthāna mentions a group of afflictions called avekṣitajagada (57).¹¹⁴ The śiṣyopakramaṇīya chapter of the same section gives an elaborate account of the initiation of students (57–65). Kaumārabhṛtya is said to be the foremost of the eight divisions of āyurveda and to be based on the *Atharvaveda* (61).¹¹⁵

The *Kāśyapaśaṃhitā* permits the study of āyurveda to students from all four varṇas (61).¹¹⁶ The same chapter contains its own version of the divine origin of āyurveda and its descent to earth (61): Brahmā, after creating the universe, bestowed the science of life on the Aśvins who transmitted it to Indra, who, in his turn, gave it to the four sages Kaśyapa, Vaśiṣṭha, Atri and Bhṛgu, who endowed their sons and students with it.¹¹⁷ The thesis is defended that āyurveda is not dependent on the *Atharvaveda* or all four Vedas, but that it is the fifth Veda, as important in relation to the other four as the thumb in relation to the four other fingers (61–62).

The Śārīrasthāna refers to a series of five and a series of six seasons (65). A number of terms reminiscent of Jainism occur in particular in this section of the *Kāśyapaśaṃhitā* (65–66).¹¹⁸ The cycle of time is, in conformity with Jain doctrine, divided into two halves, called utsarpiṇī and avasarpinī. Each half is subdivided into three yugas, the utsarpiṇī into Ādi-, Deva- and Kṛtayuga, the avasarpinī into Tretā-, Dvāpara- and Kaliyuga. The characteristics of human beings in these eras are elaborately described. The names for an aspect of the bodily structure, called saṃghanana,¹¹⁹ in the four last yugas evoke, partly at least, Jain terms: nārāyaṇa in the Kṛtayuga, ardhānārāyaṇa in the Tretāyuga,¹²⁰ kauśika in the Dvāparayuga, and prajñaptiśīta in the Kaliyuga. The life span of a human being in these four eras is declared to be one palitopama,¹²¹ a quarter, an eighth of an palitopama, and one hundred years. The same chapter contains

an outline of human anatomy (66) and a brief sketch of Sāṃkhya philosophy (67).¹²²

The numbers of bones, vessels, etc., mentioned in the outline of anatomy, agree for the greater part with those of the *Carakasamhitā*. An exception forms the number of joints (sandhi), which is 381 in the *Kāśyapasaṃhitā*, but 200 in the *Carakasamhitā* (Śā.7.14). Some other numbers disagree with those of the *Suśrutasaṃhitā*.¹²³

The description of the development of the child in the womb (70–72)¹²⁴ largely agrees with the *Carakasamhitā* (Śā.4). The lists of bodily constituents thought to be connected with each of the five mahābhūtas (72) resemble the lists of the *Carakasamhitā* (Śā.4.12) without being identical.¹²⁵ The same applies to the constituents derived from the father and the mother (72),¹²⁶ the ātman, and sātmnya (73).¹²⁷ The list of seven receptacles (āśaya; 74) disagrees with what is found in other sources.¹²⁸

The number of bones in the human body amounts to 363 (75), which odd number implies that the text of the śārīravacaya chapter cannot be correct.¹²⁹ The ten abodes of the prāṇas (prāṇāyatana; 76) are in conformity with one of the two series found in the *Carakasamhitā* (Sū.29.3).¹³⁰ The number of viscera is thirteen in the *Kāśyapasaṃhitā* (76), fifteen in the *Carakasamhitā* (Śā.7.10). The number of minor parts of the body is eighty-seven in the *Kāśyapasaṃhitā* (76–77), fifty-six in the *Carakasamhitā* (Śā.7.11). The total number of the vessels called sirā is 700 (66), ten of which, called mātar, are the most important ones (77). Peculiar to the *Kāśyapasaṃhitā* is the mention of one hundred vessels (dhamanī), originating from each ear, which transport air (anila = vā-ta) and are declared to be the supports of agni and soma (78); a preceding chapter of the Śārīrasthāna (66) considers them to be two hundred in number and to have their origin in the palate (tālu). The pores of the skin (romakūpa), which belong to the category of minute vessels (77; sūkṣmasrotas), are said to number 200,000 in males, 150,000 in females (79).¹³¹ The quantities of bodily constituents (78) agree with those of the *Carakasamhitā*.¹³²

The jātisūtrīya chapter of the Śārīrasthāna employs Vaiśeṣika terminology (79). The female procreational fluid (śoṇita) and the male semen are said to be fully formed from the age of sixteen onwards (79).¹³³ This chapter declares that the part of the menstrual cycle fit for sexual intercourse covers twelve days (the fourth to the fifteenth) for a brāhmaṇa couple, eleven for kṣatriyas, ten for vaiśyas, and nine for members of other groups (80);¹³⁴ this rule is not found in other medical works. The putrīyā iṣṭi, aiming at male offspring, described in this chapter (81), differs in details from the kāmīyā iṣṭi of the *Carakasamhitā*.¹³⁵ The diet and recommended mode of life of a pregnant woman are described in detail (84).¹³⁶ The management of labour is discussed (84–86).¹³⁷ The labour pains, called āvī in the *Caraka-* and *Suśrutasaṃhitā* (Ca.Śā.8.37–38; Su.Ni.8.12), are designated by the term grāhī in the *Kāśyapasaṃhitā* (85).¹³⁸

The Indriyasthāna (89; I.1.3–4) divides remedial measures into two broad categories: auśadha (treatment with drugs) and bheṣaja (religious treatment).¹³⁹ Grahas mentioned are: Skanda, Skandāpasmāra, Skandapitar, Pauṇḍarīka, Revatī, Suṣkarevatī, Śakunī, Mukhamaṇḍikā, Pūtanā, and Naigameśin (90).¹⁴⁰ The same seven types of dreams (91; I.1.23cd–24ab) as those found in the *Carakasamhitā* (I.5.43) are listed.

The chapter of the Cikitsitasthāna concerned with diseases of pregnant women mentions parikartikā, pravāhikā,¹⁴¹ śotha, kāmālā, hṛdroga, vātaroga, ūrdhvānila,¹⁴²

hikkā, and śvāsa (95–96).¹⁴³ The chapter on puerperal diseases (duṣprajātacikitsita) has a long list of these disorders (97).¹⁴⁴

The chapter on children's diseases caused by demonic beings (bālagraha) enumerates the twenty names of Revatī (99) which, when twice daily recited, protect a child from attacks by grahas (100). Guha, i.e., Kārttikeya, exposes that he regards Revatī, along with her five brothers and her sister Śaṣṭhī, as deserving of the same homage which is paid to himself; the sixth tithi, called śaṣṭhī, will be the day on which she should be worshipped. Two forms of Ṣaṇmukhī Śaṣṭhī are distinguished, Sūtikāśaṣṭhī¹⁴⁵ and Pakṣaśaṣṭhī.¹⁴⁶ A long list of disorders is said to be caused by Revatī (100).¹⁴⁷ The chapter goes on with a description of their treatment. The next subject is a myth relating how Pūtanā was born, another female demon, who bears five names.¹⁴⁸ The treatment of the disorders she may bring about is dealt with (101–102). Subsequently, disorders caused by Andhapūtanā and by Śītapūtanā, also known as Kaṭapūtanā,¹⁴⁹ are described, together with their treatment (102–103). The next verses contain the mythical origin of Mukhamaṇḍikā or Mukhārcikā, a female attendant of Skanda (= Kārttikeya) (103). The preserved part of the chapter ends with descriptions of the treatment of ailments caused by Mukhamaṇḍikā and Śītapūtanā (103–105).

The chapter on udāvarta lists six varieties, brought about by the suppression of the urges to break wind, defecate, urinate, ejaculate, vomit and sneeze (106);¹⁵⁰ the same chapter describes ānaha (106).¹⁵¹

Rājayaḥṣman is said to present six or eleven symptoms (110).¹⁵² The *Kāśyapaśaṃhitā* (116) mentions the same nine curable and incurable types of kuṣṭha as the *Bhelasāṃhitā*. The doṣas involved in some of the varieties of kuṣṭha are the same as those mentioned in the *Carakasāṃhitā* (Ni.5.5), with the exception of the two doṣas giving rise to sidhma.¹⁵³ The eight types of mūtrakṛcchra (120)¹⁵⁴ differ from those mentioned in the *Caraka-* and *Suśrutasāṃhitā*;¹⁵⁵ aśmarī (vesical calculi) and śarkarā (vesical gravel) are referred to in the chapter on mūtrakṛcchra, but not characterized. The two main categories of ulcers (vraṇa; 123) are the same as in the *Carakasāṃhitā* (Ci.25.5): nija and āgantū. Kāśyapa declares in the chapter on this subject (dvivraṇī-yacikitsita)¹⁵⁶ that he will deal with it succinctly, because it belongs to the domain of another medical specialism. A series of therapeutic procedures (upakrama) is listed (124), without indicating their number.¹⁵⁷ The same chapter (126) enumerates types of boils (piḍakā), occurring in children: three with an excess of kapha (śarāvikā, kacchapikā, jālinī), three with an excess of pitta (sarṣapikā, alajī, vidradhi), one with an excess of vāta (vinatā), and one with an excess of all three doṣas (aruṇṣikā).¹⁵⁸ The vraṇa chapter also describes the aetiology, symptoms and treatment of arakīlikā (128), a disease unknown from other sources under this name.¹⁵⁹ Another, otherwise unknown, disorder, found in this chapter, is āmaccheda (129).¹⁶⁰

The dvivraṇīya chapter contains an interesting myth on the origin of a particular type of boils (gaṇḍa) in children (129). This disorder is attributed to an elephant, called Duḥṣaha, appearing in dreams of children and frightening them. This animal, resembling Airāvata, was created by Indra in order to satisfy Mahāśena. Duḥṣaha created, in his turn, two grahas, called Śākha and Viśākha, who, out of gratitude, made him obtain the overlordship of all upagrahas.¹⁶¹ The treatment of the boils caused by Duḥṣaha

consists of both drugs and homage paid to him on the pañcamī (fifth tithi) of each lunar month.

The chapter on pratiśyāya refers to blood on the same footing as the three doṣas (130). A separate chapter is devoted to uroghāta (132–133), a disease related to pratiśyāya.¹⁶² Four doṣic types of uroghāta are referred to. Śopha (inflammatory swelling) is said to be of four types (133).¹⁶³ The chapter on the treatment of parasitic disorders (kṛmiroga) refers to viḍāṅgaghṛta (134).¹⁶⁴ Three disorders due to the abuse of alcoholic drinks are distinguished: pānātyaya, pānavibhrama and pānāpakrama (135).¹⁶⁵ Four doṣic types of pānātyaya are described (137).¹⁶⁶

A disease not described in any other treatise is phakka (139–142). A child affected by it does not learn to walk at the normal age.¹⁶⁷ Three varieties of phakka are distinguished, caused by a disorder of the breastmilk (kṣīraja), a disorder of the mother during pregnancy (garbhaja), and some other disease (vyādhija). Preparations employed in the treatment of phakka are kalyāṇakaghṛta, ṣaṭpalaghṛta and amṛtaghṛta (141);¹⁶⁸ brāhmīghṛta¹⁶⁹ was probably also prescribed, because it is referred to. Sūdras were excluded from the use of this brāhmīghṛta. Particularly recommended is a recipe called rājataila, which proved to be salutary to the sons of Ikṣvāku, Subāhu, Sagara, Nahuṣa, Dilīpa, Bharata and Gaya.¹⁷⁰ Finally, a tricycle (tricakra phakkarakathaka) is described as a tool that is helpful to children suffering from phakka. The same chapter describes deafness (bādhirya) and dumbness (mūkatva), originating from a defect in either the one or the other half of the organ of speech.

The last chapter of the Cikitsasthāna is concerned with the treatment of disorders in wet-nurses (142–146).

The Kalpasthāna of the *Kāśyapaśaṃhitā* is not devoted, as the corresponding sections of the *Caraka-* and *Bhelaśaṃhitā* are, to drugs which have a śodhana (emetic or purgative) action, but deals with diverse subjects.

Chapter one (170–174) is concerned with fumigations (dhūpa),¹⁷¹ especially to be employed with the aim of warding off demons afflicting children. Substances of animal origin are important ingredients of these dhūpas, many of which have names. Three types of dhūpa are mentioned: dhūpa, anudhūpa and pratidhūpa. A story is told about Agni who bestowed the formulae of the dhūpas to the sages in order to protect children. A long mantra should be recited to make the treatment more successful (173).¹⁷² An āgneya dhūpa (170) is regarded as particularly suitable to brāhmaṇas, whereas another dhūpa, called brāhma (171), may be prescribed to brāhmaṇas, kṣatriyas and vaiśyas.¹⁷³

Chapter two (174–181) is on the mythical origin of garlic (laśuna) and its uses in medicine.¹⁷⁴ Garlic is said to originate from drops of the amṛta which fell on the earth when Indrāṇi belched the amṛta forth that Indra had made her drink in order to cure her infertility. The properties of laśuna, as described in the *Kāśyapaśaṃhitā* (175), do not completely agree with those mentioned in other treatises.¹⁷⁵ The medicinal effects are mostly those found in a rasāyana. Many rules are given which pertain to the diet, etc., to be observed after the consumption of garlic. Rituals connected with laśuna are also described, in particular a garlic festival (gandhamaha; 180);¹⁷⁶ this festival owes its origin to Rudra, who expounded its beneficial effects to Bhadrakālī Umā¹⁷⁷ on an occasion when he, incognito, begged for alms in the Devadāru forest;¹⁷⁸ the garlic fes-

tival was instituted on this occasion as a means to deliver the wives of the sages from their childlessness (180–181).¹⁷⁹

Chapter three (kaṭutailakalpa; 181–183)¹⁸⁰ opens with the claim that kaṭutaila (mustard oil) is the most excellent medicine in the treatment of plīhan (splenomegalia). Recipes are given against plīhan, rules about their dosage, etc. Chapter four (ṣaṭkalpa; 183–185) is about the treatment of eye diseases in children.¹⁸¹ Chapter five (185–187) is concerned with the properties of śatapuspā and śātavarī and their uses in medicine.

Chapter six, the Revatīkalpa (187–202), forms one of the most interesting parts of the *Kāśyapaśaṃhitā*. Partly in prose of an archaic type, partly in verse, this long chapter deals with female demons, called Jātahāriṇī, who are manifestations of Revatī.¹⁸² After a long mythological excursus, beginning with Prajāpati's creative acts, a story is told about an evil being (asurakanyā) called Dīrghajihvī,¹⁸³ who was destroyed by Revatī. This introduces Revatī as the chief character of the chapter. She is transformed into Jātahāriṇī, a being killing children in their mothers' womb. Her names are Revatī, Pilipicchikā, Raudrī, and Vāruṇī.

The Revatīkalpa proceeds with describing which types of bad behaviour in women provoke Revatī's wrath and lead to misfortune for the unborn child. Behavioural rules and rituals serving to ward off the attacks of Revatī are described, as well as many patterns of behaviour resulting in such an attack. The disorders in women caused by Revatī are many and manifold. The symptoms of these disorders are listed, together with the names designating both the women suffering from them and the Jātahāriṇīs.¹⁸⁴ Śu-ṣkarevatī, Kaṭambharā, Revatī, Vikuṭā, Parisrutā, Aṇḍaghñī, Durdharā, Kālarātrī, Mohinī, Stambhanī, Krośanā, and Nākinī are characterized by menstrual disorders or the death of the unborn child. The names of the fifteen Jātahāriṇīs causing the death of the child on the first up to the fifteenth day of its life are Piśācī, Yakṣī, Āsurī, Kālī, Vāruṇī, Śaṣṭhī, Bhīrukā, Yāmyā, Mātangī, Bhadrakālī, Raudrī, Vardhikā, Caṇḍikā, Kapālamālinī, and Pilipicchikā. Jātahāriṇīs leading to the child's death in a later period are Vaśyā, Kulakṣayakarī, Puṇyajanī, Pauruṣādinī, Saṃdaṇṣī, Karkoṭakī, Indravaḍavā, and Vaḍavāmukhī. Some verses on the origin of twins and their characteristics follow.

The discourse on Revatī continues with an exposition by Kāśyapa on the three forms she assumes, daivī, mānuṣī and tiraścīnī, which enable her to pervade the worlds of the gods, human beings and animals. The homage paid to Revatī by the gods and the sages (Kāśyapa included) made her endow them with numerous and prosperous offspring. This tale introduces the Revatīkalpa *sensu stricto*, as expounded by Kāśyapa to his pupils.

Kāśyapa tells Vṛddhajaṇvaka that women who do not observe the rules of dharma may be harassed by Revatī and therefore require expert medical care. Women belonging to one of the four varṇas or a mixed class (varṇāntara), as well as women called līnginī and kārūkī, are liable to Revatī's attacks. The Revatīkalpa describes in which way these attacks manifest themselves in each of the classes of women enumerated and gives details on the expiation (prāyaścitti) that is required. This part of the Revatīkalpa contains long lists of mixed castes, of female ascetics (līnginī),¹⁸⁵ and of women belonging to various castes of artisans (kārūkī) (195).

This section on the mānuṣī form of Revatī is followed by one on her tiraścīnī form,

its five varieties (śakunī, catuṣpadī, sarpā, matsyī, vanaṣpatī) and numerous subvarieties (196–197); this section argues strongly in favour of ahiṃsā, because the intentional killing of animals incenses particular forms of Revatī. The Revatīkalpa ends with a list of symptoms presented by children afflicted by Revatī (198–199) and an elaborate description of the ritual (varaṇabandha) to be performed by the physician in order to save these children.¹⁸⁶ Successful performance of the rite demands that the physician be conversant with the mātaṅgī vidyā,¹⁸⁷ obtained by the great sage Maṭaṅga, Kaśyapa's youngest son,¹⁸⁸ from Brahmā. The effects of this powerful vidyā are extolled. Next to it, the rudramātaṅgī and its beneficial effects are described.¹⁸⁹

Chapter seven (bhojanakalpa; 202–213) is about feeding habits and foods; numerous countries are mentioned, together with the foods most suitable to their inhabitants (206–207); details are given on the uses of maṇḍa,¹⁹⁰ yavāgū (gruel), milk, and sugar-cane juice.

Chapter eight (viśeṣakalpa; 213–225) has saṃnipāta fevers as its subject, their varieties, and their treatment. Thirteen types of saṃnipātajvara are mentioned; due to the lacunary state of the text, the descriptions have only partially been preserved (214–217).¹⁹¹ Some interesting verses (217) show that the aetiology of the saṃnipāta fever called kūṭapākala was a hotly debated issue.¹⁹² A previously healthy person, suddenly presenting signs pointing to excitement of all three doṣas, will be covered with boils (piḍakā) called viśasaṃjñaka (217).¹⁹³

Chapter nine (saṃhitākalpa; 225–227) is, as already mentioned, about the origin and contents of the *Kāśyapa-saṃhitā*.

The Khilasthāna begins with a chapter on irregular fevers (viśamajvaranirdeśīya; 227–234). Vṛddhajīvaka puts questions to Kaśyapa on the aetiology of these fevers, because this subject is absent from the chapter on the treatment of fevers in general. Four irregular fevers are described, satataka, anyedyuṣka, tṛtīyaka and caturthaka, to which pretajvara and grahajvara are added. Satataka has the nature of Agni, dvitīyaka (= anyedyuṣka) that of Vāyu, while tṛtīyaka and caturthaka are associated with the Viśvedevāḥ and Īśāna. Chapter two (viśeṣanirdeśīya; 234–240) proceeds with describing fevers and their treatment; groups of drugs are enumerated which are śodhana, śamana and śamanaśodhana (238–239; 257–62ab).

Chapter three (bhaiṣajyopakramaṇīya; 240–249) deals with the classification of diseases; a bodily disease is called vyādhi, a mental disorder ādhi¹⁹⁴ (241; 3.19); pharmaceutical preparations of vegetable origin are divided into seven types: cūrṇa, śītaśāyā, svarasa, abhiṣava, phāṇṭa, kalka, and kvātha (242–243; 3.35–43ab);¹⁹⁵ the periods of time at which a medicine should be taken (auśadhakāla) are ten in number (243–244; 3.43–52);¹⁹⁶ the stages of the human life cycle are discussed (245–246; 3.71ab–76); much attention is given to the dosages of medicines to be administered to children (246–248; 3.77–102ab).¹⁹⁷

Chapter four (yūṣanirdeśīya; 249–255) is about medicinal soups (yūṣa) and related preparations (peyā, yavāgū); twenty-five different soups are described (250–251; 4.19cd–24ab), divided into two (251; 4.24cd–25ab)¹⁹⁸ or three (251; 4.25cd–26ab)¹⁹⁹ groups.

Chapter five (bhojyopakramaṇīya; 255–260) is concerned with diet, sātmya, the

tastes, articles of food that may or may not be combined,²⁰⁰ etc.; the combination of milk and fish is, as in the *Carakasamhitā*,²⁰¹ advised against.

Chapter six (*rasadoṣavibhāgīya*; 261–268) distinguishes sixty-two disturbed states of the doṣic equilibrium (261–262; 6.5–11);²⁰² the tastes and their combinations (their total number is sixty-three) are also listed (262–263; 6.12–19);²⁰³ further subdivisions of the conditions which may prevail among the doṣas and the tastes make their total numbers into 4,160 and 3,073 respectively (265–266; 6.48–70ab).

Chapter seven (*saṃśuddhivēśeṣaṇīya*; 268–277) is mainly devoted to treatment with emetics and clysters.

Chapter nine (*raktagulmaviniścaya*; 286–292)²⁰⁴ is entirely devoted to *raktagulma*, a disease restricted to women, characterized by symptoms simulating pregnancy. The *Kāśyapaśaṃhitā* is the only treatise known with a separate chapter on this disorder.²⁰⁵ The chapter is of importance because it contains much material on female physiology and some related topics. The human body is described as possessing seven receptacles (*āśaya*), for faeces, urine, parasites (*krimi*), undigested (*ārma*) and digested (*pakva*) food, *kapha*, and *vāta*; an eighth receptacle, the uterus (*garbhāśaya*), is present in women (9.16).

Chapter ten (*antarvatnīcikitsita*; 293–304)²⁰⁶ is about diseases of pregnant women and their treatment; diseases mentioned are: *jvara* (293–297; 10.4–65), *atisāra*, (*pra*)*vāhikā*, *parikartikā* (10.102cd–106ab),²⁰⁷ *pārsvopagraha*, *mukhapāka*, *ākṣepa*, *apatānaka*, *chardi* (10.118–127ab),²⁰⁸ *kāmalā*, *hṛcchūla* (10.128cd–131ab),²⁰⁹ *kāsa*, *śvāsa*, *ūrdhvānila* (10.141),²¹⁰ *hikkā*, *mūtragraha*, *gulma*, *vātaroga*, *granthi*, *piḍakā*, *śoṭha*, *rohiṇī*, *bhagna*, and *sarpadaṃśa* (snake-bite); the remaining part of the chapter is filled with signs pointing to some disorder of pregnancy, and with *ariṣṭas*.

Chapter eleven (*sūtikopakraṇīya*; 304–316)²¹¹ defines the terms *sūtikā* (11.6);²¹² a list of sixty-four puerperal diseases is presented (11.7–13);²¹³ the three types of country (*deśa*) are mentioned, together with the treatment appropriate to women living in these regions (11.28–33); due consideration should be given to *mleccha* (i.e., non-Aryan) women and their habits (11.34–36);²¹⁴ six types of puerperal fevers are referred to, caused by *vāta*, *pitta*, *kapha*, *saṇnipāta*, *lactation*, and *grahas* (11.39–69); a large part of the chapter is devoted to the treatment of puerperal fevers.²¹⁵

Chapter twelve (*jātakarmottara*; 316–319) is concerned with rituals to be performed in the first year of life and the treatment of infants;²¹⁶ at the end of the first month the child is shown the sun and the moon; in the fourth month the child is taken to a temple where several deities are worshipped (*niṣkramaṇasaṃskāra*); in an interesting ritual to be performed in the sixth month of life, *Prthivī* is invoked, while the child is surrounded by auspicious objects and all kinds of toys; the *annaprāśana*, the ceremony of giving cooked food to the child for the first time, should take place not in the sixth, but in the tenth month, after the eruption of the teeth; fruit juices may already be administered in the sixth month.²¹⁷

Chapter thirteen (*kukkuṇākacikitsita*; 319–324)²¹⁸ deals with an eye disease in children, called *kukkuṇaka*,²¹⁹ ascribed to unhealthy dietary habits of the person nursing the child, and said to be caused by *kapha* and blood; the symptoms described resemble those of a conjunctivitis.²²⁰

with matter found in the chapters of the same name of the *Caraka-* and *Bhelasamhitā*. The prescriptions of the *Strīcikitsāsūtra* are more elaborate than those of Caraka and Bhela. Particular to it are prescriptions for the tenth, eleventh and twelfth months of pregnancy.

The *Kāśyapasaṃhitā* is the only medical treatise that presents Kaśyapa as a specialist in *kaumārabhṛtya*, whereas many medical authors and works quote from or refer to a specialist in this branch of *āyurveda* who was called Kāśyapa.³¹³ As we have seen, the *Strīcikitsāsūtra* conforms to this tradition. An authority on *kaumārabhṛtya* called *Vṛddhakāśyapa* is also known from quotations.³¹⁴

The confusion of Kaśyapa and Kāśyapa has a long history, as attested by an anonymous monograph on fevers, the *Jvarasamuccaya*, a work dating from before A.D. 924. This work contains a number of verses, attributed to Kāśyapa, which closely agree with lines found in the text of the *Kāśyapasaṃhitā*.³¹⁵

The other quotations from the specialist in *kaumārabhṛtya* called Kaśyapa cannot be traced in the preserved parts of the *Kāśyapasaṃhitā*, which, if the possibility that they are in toto from lost parts of the treatise is discarded, proves that a different version, no longer extant, has been current.

The Kaśyapa of the *Kāśyapasaṃhitā* is by a number of, chiefly Indian, authors regarded as a very ancient authority, contemporary of Ātreya Punarvasu.³¹⁶ In my opinion, it is not open to doubt that this great Kaśyapa, the *Prajāpati*, figures in the work to give it the weight of antiquity and has no implications for its chronological position.³¹⁷

Kaśyapa's chief pupil, *Vṛddhajīvaka*, although by some considered to be identical with the *Jīvaka* of Buddhist literature,³¹⁸ is clearly a different person.³¹⁹ The *Jīvaka* of Buddhist literature was a surgeon, whereas *Vṛddhajīvaka* was trained in *kaumārabhṛtya*.³²⁰ A complication that may have contributed to this confusion is the fact that *Vṛddhajīvaka* is referred to as *Jīvaka* in Anantakumāra's *Yogaratanasamuccaya*, the Bower MS, *Ḍalhaṇa's Nibandhasaṃgraha*, the *Strīcikitsāsūtra*, and *Vaṅgasena's Cikitsāsārasaṃgraha*.³²¹

The names of *Jīvaka* and *Vṛddhajīvaka* are connected with each other by P.V. Sharma,³²² who supposes *Vṛddhajīvaka*, in conformity with his name, to be somewhat earlier than *Jīvaka*.

The date of the version of the *Kāśyapasaṃhitā* from which the untraced quotations derive cannot be established. The same applies to the treatise before its revision by *Vātsya*.³²³ The work rewritten by *Vātsya* may have had *Vṛddhajīvakiyatantra* as its title, as borne out by some colophons,³²⁴ which are of the same type as those found in the *Carakasamhitā*, revised by *Drḍhabala*.³²⁵

Vātsya, who introduces himself in the last chapter of the *Kalpasthāna*, which was probably the final chapter of the work before he began revising and completing it, is, on account of his association with the *yakṣa* *Anāyāsa*, who protected the city of *Kauśāmbī*, the capital of *Vatsadeśa*,³²⁶ supposed to have resided there.³²⁷ Others interpret the name as an indication of his having been a *brāhmaṇa* of *Vatsagotra*, in the same way as *Vātsyāyana*, the author of the *Kāmasūtra*.³²⁸

Due to *Vātsya's* activity, the sections of the *Kāśyapasaṃhitā* from the *Sūtrasthāna* up to the *Kalpasthāna* consist of two layers which can, unfortunately, not be distin-

guished from each other. The Khilasthāna, an appendix that resembles the Uttaratantra of the *Suśrutasaṃhitā*, was probably in its entirety added by Vātsya,³²⁹ as indicated by its contents and by the colophons which no longer refer to a pratisaṃskartar. Many chapters of the Khilasthāna mention that a particular subject, not dealt with in the preceding sections, will be expounded.³³⁰ Moreover, some subjects already dealt with in the Cikitsasthāna, are discussed again in the Khilasthāna.³³¹

The date of Vātsya's revised version of the *Kāśyapaśaṃhitā* is elucidated by the quotations in the *Jvarasamuccaya*, the MS of which was completed in A.D. 924.³³² A version of the *Kāśyapaśaṃhitā* related to the text known to us was apparently available to the author of this *Jvarasamuccaya*, who apparently lived some time before A.D. 900. The *Kāśyapaṣṭiprakāśatīcikitsāsūtra* may point to a version being known in the tenth century. Some statements on the qualities of breastmilk, attributed to Jīvaka by Vaṅgasena (strīroga 341–344), suggest that this author was acquainted with the *Vṛddhajīvakiyatantra*, because the relevant verses may have formed part of chapter nineteen of the Sūtrasthāna of the *Kāśyapaśaṃhitā*. Vaṅgasena's work contains some more verses, not ascribed to any authority, which are found in the *Kāśyapaśaṃhitā*.³³³

More evidence concerning the date of Vātsya's revised version of the *Kāśyapaśaṃhitā* can be collected only from its contents. The references to Jainism³³⁴ and Buddhism³³⁵ are not of much avail for chronological purposes. Hinduism prevails in the work. The type of Hinduism of which the *Kāśyapaśaṃhitā* gives evidence is in favour of dating it to the Gupta period.³³⁶ In support of this are the Tantric elements present: Bhadrakālī is mentioned (180; laśunakalpa 108); Tantric mantras are employed;³³⁷ the mātaraṅgī vidyā is referred to (199–200; Revatīkalpa 80);³³⁸ the Siddhas should be honoured by a physician (37; Sū.26.4); siddhamantras are mentioned (230). Indicative of the same age are the social structure, reflected, for example, in the numerous references to varṇas, castes and professions,³³⁹ the increased influence of popular religion³⁴⁰ in comparison with the *Carakasamhitā*, *Suśrutasamhitā*, and the works of Vāgbhaṭa, the geographical terms,³⁴¹ and the names of peoples such as the Hūṇas.³⁴²

Nosological features with a bearing on the chronological position of the *Kāśyapaśaṃhitā* are the separate chapters of the Khilasthāna on śūla and amlapitta, diseases not yet described as distinct nosological entities by Caraka, Bhela, Suśruta, and Vāgbhaṭa, but appearing as such in the *Mādhavanidāna*, where, however, the descriptions are so much different that the *Kāśyapaśaṃhitā* and *Mādhavanidāna* may be regarded as completely independent in this respect. The absence of any influence from the side of the *Mādhavanidāna* strengthens the view that the *Kāśyapaśaṃhitā* is earlier and may tentatively be placed in about the seventh century.³⁴³

P.V. Tewari³⁴⁴ assumes that someone made changes in the text rather late, in the eleventh to thirteenth century. This unknown reviser made Vātsya take part in a discussion; he also added three lines to the end of chapter nineteen of the Sūtrasthāna.

Chapter 4

Hārītasamhitā

The *Hārītasamhitā*^{1,2} is one of the complete textbooks that deal principally with internal medicine (kāyacikitsā); it differs considerably from the *Caraka-* and *Bhelasamhitā* which focus on the same division of āyurveda.

Contents

The *Hārītasamhitā* is written in the form of a dialogue between Ātreya³ and Hārīta.⁴ The treatise is designated as *Ātreyaabhāṣita Hārītottara* in nearly all the chapter colophons, with only one exception (I.2), where it is referred to as *Vaidyasarvasva*. Hārīta, sometimes addressed as Putra(ka) (I.1.8; III.5.22; III.8.11),⁵ receives the teachings of Ātreya, also referred to as Atri (V.1.1; pariśiṣṭādhyaḥ) and pitar (I.8.5), who is surrounded by students, on the northern slopes of the Himālayas (I.1.2–5; V.1.1).

The work is almost entirely in verse, apart from a portion of the Śārīrasthāna, the ritual prescriptions,⁶ and the mantras.

The internal arrangement diverges considerably from that of the other samhitās. The number of chapters is 102; one additional chapter, the pariśiṣṭādhyaḥ, is found at the end. The chapters are distributed over six sections (sthāna), the names of which are given in the text (I.2.3–4) and in part of the colophons of sections IV, V and VI. The name of each chapter is found in the colophon only, in contrast with the *Caraka-*, *Suśruta-*, *Bhela-*, and *Kāśyapasamhitā*, where the title of a chapter figures at the beginning. A detailed table of contents is absent.⁷

The *Hārītasamhitā* is composed of the following sections: I, annapāna, twenty-three chapters;⁸ II, ariṣṭa, nine chapters; III, cikitsita, fifty-eight chapters; IV, sūtra, six chapters; V, kalpa, five chapters; VI, śārīra, one chapter.⁹

The subjects of the chapters of the Annapānasthāna are: (1: vaidyaguṇadoṣaśāstrapāṭhanavidhi): after the maṅgala (to Śiva) and the introductory dialogue between Ātreya and Hārīta, an exposition is given by Ātreya on the extent of the medical science, followed by the announcement that he is going to teach a very concise version of it;¹⁰ the next subjects are the qualities a vaidya should possess, the way āyurveda should be studied, and the circumstances prohibiting its study;¹¹ (2: cikitsāsāṅgraha): the eight sections of the work, the aṅgas of āyurveda, and the supplementary aṅga (upāṅga); (3: vaidyaśikṣāvidhāna): generalities on the physician and his activities; (4: ṛtucaryā): the types of country, the three divisions of time, the regimen during the seasons; (5: doṣaprakopa): the stages of life (vayas), the constitutions (prakṛti), the

different kinds of vāyu (= vāta), the causes of excitement of vāyu, pitta and kapha; (6: *ṣaḍrasavarṇana*): the six tastes.

Chapters seven to twenty-three are devoted to the medicinal properties of foods and drinks:¹² water (7: *jala*), milk and dairy produce (8: *kṣīra*), urine (9: *mūtra*), products of the sugarcane (10: *ikṣu*), *kāñjika* (11), *maṇḍa* (12), *yūṣa* (13), fatty substances (14: *tailavasā*), grain (15: *dhānya*), vegetables (16: *śāka*), fruits (17: *phala*), honey (18: *madhu*), alcoholic drinks (19: *madya*), flesh of quadrupeds (20: *catuṣpādānāṃ māṃsa*-*avargaḥ*), flesh of terrestrial animals, mainly birds (21: *sthalacarāṇāṃ māṃsa*-*avargaḥ*), flesh of aquatic animals (22: *jalacarāṇāṃ māṃsa*-*avargaḥ*), and prepared foods, supplemented with rules concerning diet (23: *annapāna*).

The *Aṛīṣṭasthāna*¹³ deals with diseases resulting from bad *karman* (1: *pāpado-ṣapratīkāra*),¹⁴ dreams and their prognostic meaning (2: *svapna*),¹⁵ signs foreboding death (3: *svāsthyāriṣṭa*),¹⁶ unfavourable prognostic signs in a long series of diseases (4: *vyādhyariṣṭa*),¹⁷ alterations of the sensorial faculties (5: *pañcendriyavikāra*),¹⁸ afflictions caused by the *nakṣatras* (6: *nakṣatrajñāna*), oblations into the sacrificial fire (7: *homavidhi*), prognostic signs connected with the messenger (8: *dūtaparīkṣālakṣaṇa*),¹⁹ prognostic signs connected with birds (9.1–12: *śakuna*)²⁰ and with objects seen by the physician on his way to a patient (9.13–18: *darśanāriṣṭa*).²¹

Chapter one of the *Cikitsasthāna* is concerned with generalities about fevers and their treatment with drugs and diet (1: *bheṣajaparījñānavidhi*); the remaining chapters are devoted to diseases and their treatment (2–58).²²

The *Sūtrasthāna* is devoted to weights and measures (1: *tulāmāna*), the preparation of medicated oils (2: *tailapāka*), clysters (3: *nirūhabastikarman*), sudation (4: *svedana*), bloodletting (5: *raktāvasēcana*), and the application of leeches (6: *jalaukacāra*).

The chapters of the *Kalpasthāna* are about: (1) *harītakīkalpa*, (2) *triphalākvātha*, (3) various preparations with *harītakī* as the main ingredient (*harītakīkalpavarṇanabheda*), (4) *rasanakalpa*, (5) *guggulukalpa*.

The *Śārīrasthāna* describes the nature of the human body (*dehaprakṛti*), the origin of twins (*apatyayugma*) and individuals who are neither male nor female (*napuṃsaka*), and the formation of human beings (*sattvasaṃbhava*).

The *parīṣiṣṭādhyaḥ* describes the termination of *Hārīta*'s instruction by *Ātreya* and extols a number of medical authorities.

As already mentioned, the structure of the *Hārītasamhitā* and the distribution of the subject-matter disagree with the *samhitās* of *Caraka*, *Bhela*, *Suśruta* and *Vāgbhaṭa*. The differences are so considerable that *Hārīta*'s treatise can hardly be regarded as belonging to the school of *Ātreya*, in spite of the latter's position as *Hārīta*'s teacher.²³

The first section, the *Annapānasthāna*, contains the larger part of the material commonly found in a *Sūtrasthāna*, while the remaining general subjects are treated in section four, the *Sūtrasthāna*.²⁴ The *Aṛīṣṭasthāna* corresponds to the *Indriyasthāna* of the *Caraka*- and *Bhelasamhitā*. A *Nidānasthāna* is absent; the *nidāna* of the diseases is described in the *Cikitsasthāna*.²⁵

The order of the diseases in the *Cikitsasthāna* does not follow one of the earlier patterns and is peculiar to the *Hārītasamhitā*. The *aṅgas* of *āyurveda* are represented in this section as follows: *kāyacikitsā*, 1–39; *śālākya*, 40–42 and 44–46; *rasāyana*, 43;

vājīkaraṇa, 47; kaumārabhṛtya, 48–54; bhūtavidyā, 55;²⁶ viṣatantra, 56; upāṅga, 57–58;²⁷ the material on śalya is scattered over the kāyacikitsā chapters and is found in particular in chapters 35 and 38.

An unusual feature is the presence of separate chapters on śūla (7), dāha (17), āmavāta (21), amlapitta (24), upasarga (34), ślīpada (36), arbuda (37), gaṇḍamālā and lūtā (38), bhrūdoṣa (41), indralupta (43), and agnidagdha (58).

The *Hārītasamhitā* describes a number of diseases which are otherwise unknown.²⁸ Diseases not dealt with are ānāha, arocaka, bhagandara, hikkā, hṛdroga, kṣudraroga, medoroga, śūkadoṣa, svarabhedha, śvāsa, and upadaṁśa.²⁹

Verses about what is wholesome (pathya) and unwholesome (apathya) in a particular disease are, as is usual in later āyurvedic works, found at the end of each chapter of the *Cikitsitasthāna*.

The *Sūtra*- and *Śārīrasthāna* of the *Hārītasamhitā* follow upon the *Cikitsitasthāna* instead of, as usual, preceding it.

Authorities mentioned in the *Hārītasamhitā*, apart from those named in the *pari-śiṣṭī*dhya, are: Agastī,³⁰ Agastya,³¹ Atri,³² Kāṅkāyana,³³ Kṛṣṇātreya,³⁴ and Parāśara.³⁵

Quotations and references³⁶

The following authors and works quote Hārīta or refer to him: Ādhamalla,³⁷ the *Amṛtasāgara*,³⁸ Ananta's *Pratāpakalpadruma*,³⁹ Anantakumāra,⁴⁰ Aruṇadatta,⁴¹ Āryadāsa Kumārasinpha's *Kvāthamaṇimālā*, the *Āyurvedābhdhisāra*⁴² and its commentary,⁴³ ŚrīTvāṇeśvara Bhaṭṭācārya's *Rasaratnādīpikā*,⁴⁴ Bhāvamiśra,⁴⁵ *Bheṣajakalpasārasaṅgraha*,⁴⁶ *Bheṣajamañjūsāsanaya*, Bower MS,⁴⁷ *Bṛhannighaṇṭuratanākara*,⁴⁸ Cakra-pāṇidatta,⁴⁹ Cāmuṇḍa,⁵⁰ Candrāta,⁵¹ *Carakasamhitā*,⁵² Dalhaṇa,⁵³ *Dhanvantari*,⁵⁴ *Dhanvantari's Cikitsākalikā*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, Viśva-nātha Dvivedī's *Rasendrasambhava*,⁵⁵ Gaṅgādhara's *Bheṣajakalpa*, Gaṅgādhara's commentary on the *Carakasamhitā*,⁵⁶ *Garudapurāṇa*,⁵⁷ Gopālādāśa's *Cikitsāmaṇṭa*, Gopālādāśa Vādīndra's *Cikitsāsāra*, Govindadāśa's *Bhaiṣajyaratnāvalī*,⁵⁸ Gulrāj-śarmamiśra's commentary on the *Āyurvedaprakāśa*,⁵⁹ Haṁsarāja,⁶⁰ Harṣakīrti,⁶¹ Hemādri,⁶² Hemādri's *Lakṣaṇaprakāśa*,⁶³ Jayaratna,⁶⁴ Jejjāta,⁶⁵ Jīvanandavidyāsāga-ra's commentary on the *Rasendrasārasaṅgraha*,⁶⁶ *Jvaracikitsita*, *Jvarasamuccaya*,⁶⁷ the *Kairālī* commentary on the *Uttarasthāna* of the *Aṣṭāṅghṛdayasaṅhitā*,⁶⁸ Kalyā-ṇadāśa,⁶⁹ Karandīkar's *Nidānādīpikā*,⁷⁰ Kṛṣṇadatta,⁷¹ Kṣemaśarma, ⁷² Lakṣmaṇapa-ṇḍita's *Yogacandrikā*, the *Mādhavadravayagūṇa*,⁷³ Māgacandradeva, Māṇikyacandra's *Rasāvatāra*,⁷⁴ Meghamuni's *Meghavinoda*,⁷⁵ Nāganātha's *Nidānapradīpa*, Nara-hari's *Vāgbhaṭamaṇḍana*,⁷⁶ Narasiṅha's commentary on the *Mādhavanidāna*, Nā-rāyaṇabhūpati's *Nārāyaṇavilāsa*,⁷⁷ Nilakaṇṭha's *Basavarājīya*,⁷⁸ Niścalakara,⁷⁹ Ni-tyanātha's *Rasaratnākara*,⁸⁰ Parameśvara,⁸¹ Paraśurāma's *Rasarājāśīromaṇi*,⁸² Rā-maprasāda's *Rasendrapurāṇa*,⁸³ the *Rasayogasāgara*, Rūpanayana's commentary on the *Yogaśataka*, the *Śāligṛāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratanākara*,⁸⁴ Śaṁkara's *Vaidyavinoda*,⁸⁵ the *Satkarmadīpikā*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,⁸⁶ Śivādāśasena,⁸⁷ Sodhala,⁸⁸

Śrīkaṇṭhadatta,⁸⁹ Sukhānanda,⁹⁰ Tīsaṭa,⁹¹ Ṭoḍara,⁹² Trimalla,⁹³ Tulasīdāsa's *Yogasā-rasamgraha*, Vācaspati,⁹⁴ Vāgbhaṭa,⁹⁵ Vallabhabhaṭṭa's commentary on Śārngadhara's *Jvaratīśatī*,⁹⁶ Vijayarakṣita,⁹⁷ Vinodalālasena,⁹⁸ *Virasimhāvaloka*,⁹⁹ Viṣṇudeva's *Rasarājalakṣmī*,¹⁰⁰ Vopadeva,¹⁰¹ *Yogarātnākara*,¹⁰² and *Yogadīpikā*.

The hārītīyāḥ are quoted by Niścalakara.¹⁰³

A work called *Vṛddhahārīta*¹⁰⁴ is quoted by Anantakumāra,¹⁰⁵ Ṭoḍara,¹⁰⁶ Trimalla,¹⁰⁷ and in the *Yogarātnākara*.¹⁰⁸

A treatise called *Bṛhaddhārīta* is quoted in the *Yuktikalpataru*, attributed to Bhoja.¹⁰⁹

Quotations attributed to Ātreya or said to be from the *Ātreyasamhitā* may be from the *Hārītasamhitā*, since the work is also referred to as *Ātreyasamhitā*.¹¹⁰

The following authors and works refer to Ātreya¹¹¹ or quote him: Aghoranātha,¹¹² the *Amṛtasāgara*,¹¹³ Anantakumāra's *Yogarātnasamuccaya*,¹¹⁴ Aśvaghōṣa's *Buddhacarita*,¹¹⁵ the *Āyurvedāgama*,¹¹⁶ Bhānuji Dīkṣita,¹¹⁷ Bharadvāja's *Bheṣajakalpa*,¹¹⁸ Bhāvamiśra,¹¹⁹ Bindu's *Rasapaddhati*,¹²⁰ the Bower MS,¹²¹ the *Bṛhannighaṇṭuratnākara*,¹²² Cakrapāṇidatta,¹²³ Candraṭa,¹²⁴ the *Carakasamhitā*,¹²⁵ Dāmodara,¹²⁶ Dattarāma,¹²⁷ *Dhanvantari*,¹²⁸ Gaṇeśaśarṇana,¹²⁹ Gopālādāsa Vādīndra's *Cikitsāsāra*,¹³⁰ Govindadāsa,¹³¹ Guḷrāṣarmamiśra's commentary on the *Āyurvedaprakāśa*,¹³² Haṃsarāja,¹³³ Hārāṇacandra,¹³⁴ Harṣakīrti,¹³⁵ Hemādri's *Lakṣaṇaprakāśa*,¹³⁶ Jayarātna,¹³⁷ the *Kairālī* commentary on the Uttarasthāna of the *Aṣṭāṅghṛdayasamhitā*,¹³⁸ Kalyāṇadāsa,¹³⁹ Kāśīrāma,¹⁴⁰ Mādhava Upādhyāya,¹⁴¹ Mānakavi,¹⁴² Meghamuni,¹⁴³ Moreśvara,¹⁴⁴ Narahari,¹⁴⁵ Niścalakara,¹⁴⁶ Raghunātha Paṇḍita,¹⁴⁷ Rājeśvaradatta Miśra,¹⁴⁸ Rāmacandra,¹⁴⁹ Raṅgajyotiṛvid,¹⁵⁰ the *Rasabhūpati*,¹⁵¹ the *Rasarātnasamuccaya*,¹⁵² the *Rātnākaraśadhayoga*,¹⁵³ the *Sahasrayoga*,¹⁵⁴ the *Śāligrāmanighaṇṭu*,¹⁵⁵ Śīvadāsasena,¹⁵⁶ Śīvadatta,¹⁵⁷ Sodhala,¹⁵⁸ Śrīdāsaṇḍita,¹⁵⁹ Śrīkaṇṭhadatta,¹⁶⁰ Svāmikumāra,¹⁶¹ Ṭoḍara,¹⁶² Trimalla,¹⁶³ Vāgbhaṭa,¹⁶⁴ the *Vaidyacintāmaṇi*,¹⁶⁵ the *Vaidyāśāstrapravartakācāryānāmasamuccaya*,¹⁶⁶ Vaṇgasena,¹⁶⁷ Vāsudeva,¹⁶⁸ Vinodalālasena,¹⁶⁹ the *Virasimhāvaloka*,¹⁷⁰ Viṣṇudeva's *Rasarājalakṣmī*,¹⁷¹ Vṛnda,¹⁷² and the *Yogarātnākara*.¹⁷³

Several versions of a medical work associated with the name of Ātreya have been current, as appears from quotations from *Bṛhadātreya*, *Kaṇiṣṭhātreya*, *Madhyamātreya*, and *Vṛddhātreya*.¹⁷⁴

The *Bṛhadātreya* is quoted by Ṭoḍara¹⁷⁵ and Trimalla,¹⁷⁶ *Kaṇiṣṭhātreya*,¹⁷⁷ *Madhyamātreya*,¹⁷⁸ and *Vṛddhātreya*.¹⁷⁹ are quoted by Ṭoḍara.

These works must be regarded, at least partially, as versions of the *Hārītasamhitā* = *Ātreyasamhitā*, since some of the quotations are traceable.

An *Ātreyanidāna* is mentioned in Lakṣmīkuśala's *Vaidyakaśāstratnāprakāśa*.

Quotations from Hārīta and Ātreya that have been traced or that are related to verses occurring in the *Hārītasamhitā* are found in the *Amṛtasāgara*, the *Bhāvaprakāśa* and its glosses, Cakrapāṇidatta's commentary on the *Carakasamhitā*, Cakrapāṇidatta's *Cikitsāsamgraha*, Dattarāma's *Caryācandrodaya*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratnākara*, Śrīkaṇṭhadatta's commentary on Vṛnda's *Siddhayoga*, and Ṭoḍara's *Āyurvedasaukhyā*.¹⁸⁰

Ṭoḍara's *Āyurvedasaukhyā* contains a verse attributed to Atri that forms part of the

Hārītasamhitā.¹⁸¹

Vāsudeva's *Vāsudevānubhava* mentions among its sources Atri, *Brhadatri* and *La-ghvatri*, which may be related to the works called *Ātreyaśamhitā*, *Brhadātreya* and *Ka-ṇiṣṭhātreya*, unless they are versions of the *Atrismṛti*.¹⁸²

An *Atrisamhitā* was among the sources of Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, Jivānandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha*, Raṅga-jyotirviḍ's *Vicārasūdhākara*, and Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.¹⁸³

Some verses of the edited text of the *Hārītasamhitā* are also found¹⁸⁴ in the *Bhāva-prakāśa*,¹⁸⁵ *Cakradatta*,¹⁸⁶ *Carakasamhitā*,¹⁸⁷ *Siddhasāra*,¹⁸⁸ *Siddhayoga*,¹⁸⁹ and *Suśrutasaṃhitā*.^{190 191}

Special features¹⁹²

Although the medical science is said to be eightfold (*aṣṭadhā*), the divisions enumerated and defined are nine in number: śalya or śalyoddharaṇaka, śālākya, kāyacikitsita, agada, bālacikitsita, viṣatantra, bhūtaavidyā, vājīkaraṇa, and rasāyana, while, moreover, a tenth division, called upāṅga, is added to the series; śalya heads the list, in spite of the fact that the *Hārītasamhitā* is mainly devoted to kāyacikitsā; agada deals with diseases of rectum, anal region and bladder (*gudāmaya*, *bastiruj*), to be treated with the three varieties of clysters (*ūhaka* = *nirūha*, *āsthāpana* and *anuvāsana*); this acceptance of the term agada is peculiar to the *Hārītasamhitā*;¹⁹³ bālacikitsita has the same range as the division usually called *kaumārabhṛtya*; the definition of *bhūtaavidyā* refers to possession by demoniacal beings and does not mention *unmāda*, nor *apasmāra*; the supplementary *aṅga* (*upāṅga*) is characterized by the use of cautery (*dagdha*) in the treatment of bruises, wounds, fractures, etc. (I.2). The seasons are described in the following order: rainy season, autumn, winter, cool season, spring, and summer (I.4.19–66).¹⁹⁴ The life cycle of human beings in general is divided into four stages (I.5.1–14).¹⁹⁵ The characteristics of several types of wind are enumerated, according to the points of the compass from which they are blowing, and dependent on contrivances producing a flow of air (I.5.24–42). A disease thought to be caused by a strong wind and appearing in both human beings living together in a settlement and domestic animals, is called *yaḥśman* in humans, *tilaka* in cattle, *pāvaka* in elephants, and *vedya* in horses (I.5.48). Pitta is the *doṣa* to be protected in particular in elephants, *kapha* in horses, and *vāyu* in human beings (I.5.49). The chapter on the tastes (I.6) employs the terms *lavaṇa* and *kṣāra* as synonyms. Each of the three *doṣas* is thought to be provoked or pacified by two tastes (I.5.2–4).

The chapter on the various kinds of water and their properties (I.7) deals with the subject more extensively than the *Caraka*- and *Suśrutasaṃhitā*;¹⁹⁶ it describes the properties of rainwater falling in particular months (I.7.18–24); the classification of the kinds of water resembles the one found in the *Suśrutasaṃhitā*, but the *Hārītasamhitā* adds an eighth type of *dhāra* water, *vāpyudbhava*,¹⁹⁷ to the seven of *Suśruta* (I.7.35); the verses on the water from rivers (I.7.45–65) mention a large number of names and end with the claim that the total number of rivers is 2,100. The rivers flowing to

the Northeast are Gaṅgā, Sarasvatī,¹⁹⁸ Śoṇā,¹⁹⁹ Yamunā, Sarayū,²⁰⁰ Śacī, Veṇā,²⁰¹ Śārāvātī,²⁰² and Nīlā; the rivers flowing to the eastern ocean are Carmaṇvatī,²⁰³ Vetravatī,²⁰⁴ Pārāvātī,²⁰⁵ Kṣīprā,²⁰⁶ Mahāpadī, Pītā, Mutsakā, Manasvinī, Śevātī, Śaivalinī, and Sindhu; flowing to the West are the rivers Tāpī,²⁰⁷ Tāpā, Golomī, Gomatī,²⁰⁸ Salilā, Mahī,²⁰⁹ Sarasvatī, and Narmadā;²¹⁰ flowing to the western ocean are the rivers Gautamī,²¹¹ Pūrṇā,²¹² Payasvinī,²¹³ Vetrā, Praṇītā,²¹⁴ Varānanā, Droṇā, and Govardhanī; the rivers flowing to the South are Kāverī,²¹⁵ Virakāntā, Bhīmā,²¹⁶ Payasvinī, Vibhāvarī, Viśālā, Govindī, Madanasvasā, and Pārvatī.²¹⁷

The chapter on milk and dairy produce (I.8) has some verses (I.8.2–12) on the physiology of lactation;²¹⁸ the qualities of breastmilk depend on the colour of the skin of the mother or wet-nurse (I.8.14–15ab);²¹⁹ the qualities of the milk of cows of diverse colours are described (I.8.16); the properties of dadhi (thick sour milk), produced in each of the six seasons, are enumerated (I.8.39–44).²²⁰ The chapter on urines has some verses on the properties of the urine of a bull and ox (I.9.13–14). The chapter on kāñjika (I.11) gives details on this fluid according to the kind of grain used for its preparation (yava, godhūma, yugandhara).²²¹ The chapter on grain lists eighteen varieties of rice, the names of which differ considerably from those met with in the *Carakasamhitā*, *Suśrutasamhitā* and *Aṣṭāṅgahṛdayasamhitā* (I.15.1–2); the group called kṣudradhānya consists of kaṇḍū, kapikacchurā,²²² kodrava, markāṭī,²²³ and śyāmāka (I.15.14).²²⁴ Four categories of vegetables are distinguished: pattra (leaves), puṣpa (flowers), phala (fruits), and kanda (roots, rhizomes, bulbs) (I.16.1). Three kinds of honey are distinguished: bhrāmara, sārāgha and kṣaudra, produced by bees making their nests in trees, shrubs and in the cavities of trees respectively (I.18). Alcoholic drinks are divided into four types: gauḍī, produced from guḍa (treacle), mādhvī, produced from honey, paiṣṭī, produced from grain, and niryāsā, produced from the juice of plants; twelve varieties are distinguished: three varieties of gauḍī: sīdhu, gauḍī and matsyaṇḍī, three varieties of mādhvī: mādhvīka, madhuka and mādhuva, three varieties of paiṣṭī: paiṣṭī, ariṣṭa and jāta, three types of niryāsā, produced from the juice of grapes and the plants called tāḍa and māḍa (I.9.1–4). Animals are divided into the following categories: śūlin (tusked animals),²²⁵ śṛṅgin (animals with horns), nakhin (animals with claws),²²⁶ śvāpada (animals of prey), pakṣin (birds), matsya (fishes), and sarīṣīpa (creeping animals) (I.20.1); other categories are: jalecara (a group of aquatic animals), jalādhāra (another group of aquatic animals), grāmanivāsin (domestic animals), and araṇyanivāsin (wild animals) (I.20.2), and: ānūpa, jāṅgala, and sādharmaṇa (I.20.2).

A feature peculiar to the *Hārītasamhitā* is the attention given to the influence of the nakṣatras on the course of a disease. Chapter six of the Ariṣṭasthāna is entirely (fifty-two verses) devoted to this subject, neglected in most of the āyurvedic treatises.²²⁷ Chapter seven describes an elaborate sacrificial ritual (homavidhi), to be performed on behalf of a patient; bundles of firewood (samidh), derived from many different trees, are employed in it.

The first chapter of the Cikitsasthāna describes the pathogenesis of fever in a way that differs from what is found in other treatises (III.1.1–3).²²⁸ A series of verses (1.4–11ab) describe chains of disorders, beginning with fever, resulting the one from the

other, and ending in death.²²⁹ Eleven dreadful (mahāghora) diseases are enumerated (1.11cd–12).²³⁰ The number of days required for each doṣa and group of doṣas to reach maturation (pāka) is specified (1.14–17ab). The average duration of a fever is said to be seven days (1.18cd–19). The choice treatment of fevers, consisting of fasting and related procedures (laṅghana), is described in detail (1.21–33); six varieties are distinguished (1.34);²³¹ laṅghana procedures should be employed for six days in vāta fevers, three days in pitta fevers, seven days in kapha fevers, while saṁnipāta fevers require ten days and reach maturation on the fifteenth day (1.36–37). Blood is the foremost doṣa in fevers occurring in children; in the sixteenth year of life the three doṣas (vāta, pitta, kapha) have become involved in fevers; from the twenty-fifth year onwards fevers are of a saṁnipātika type (1.38cd–39).²³²

A kvātha is thought to possess six properties (1.41); these should be taken into consideration with regard to the time of its application (1.42–46). Seven types of kvātha are described, which have different actions related to their degree of dilution or concentration (1.47–52ab). Several rules are given with regard to the administration of a kvātha (1.59–64 and 72–74).

Chapter two begins with verses on the physician, classification of diseases, etc. (2.1–25). Diseases are divided into three broad categories: karmaja, doṣaja and saḥaja (2.23–25).²³³ The remaining part of the chapter is devoted to fevers and their treatment. The names of fever and its characteristics in various living beings are enumerated (2.26–35).²³⁴ The exterior of fever (2.36–38)²³⁵ and its mythical origin are described. Thirteen types of sudation are listed (2.142–145).²³⁶ Four varieties of viṣamajvara are distinguished: ekāhika,²³⁷ dvyāhika,²³⁸ tryāhika or tṛtīyaka, and cāturthaka (2.187–194); an irregular (viṣama) fever is a fever that affects one of the elements of the body in particular: velājvara²³⁹ affects the rasa, ekāhika the blood, tṛtīyaka the muscular tissue, cāturthaka the bone tissue, while the fever called jīrṇa affects all the elements (2.195).²⁴⁰ Patients suffering from fever are advised to pay homage to Hanumant²⁴¹ and to recite a mantra addressed to Sugrīva²⁴² (2.218–219).

Fever, seen as an anthropomorphic figure, manifests itself fourfold and causes four types of fever: raudrajvara, when appearing like a brāhmaṇa, mahāraudra or mähendrajvara in its kṣatriya form, jvareśvara in its vaiśya, and kālajvara in its śūdra form; the symptoms of these fevers are described, together with their, mainly religious, treatment (2.220–234).²⁴³

Chapter three, devoted to diarrhoea, begins with the classification of remedial measures, divided into two triads: doṣasaṁśama, dhātudūṣaṇa, and health-maintaining (used in svasthavṛtti),²⁴⁴ daivapathāśraya, yuktipathāśraya, and sattvāvajaya (3.2–3).²⁴⁵ Five varieties of diarrhoea (atisāra) are distinguished: caused by vāta, pitta, kapha, blood, and saṁnipāta.²⁴⁶ Chapter three also deals with jvarātisāra (3.7–8, 11–15, 20–22).²⁴⁷ The same chapter describes the four types of grahaṇī and their treatment (3.79–108).²⁴⁸ A complication of grahaṇī is a disorder called the third type of gulma;²⁴⁹ six varieties of it are distinguished: plīhana, yakṛt, jaṭhara, kaṇḍū, malabandha or aṣṭhīlā, and krimi (3.84–85).²⁵⁰

Chapter four describes five varieties of gulma, distinct according to their localization:²⁵¹ yakṛt in the cardiac region, aṣṭhīlā in the lateral parts of the abdomen, plīhana

in the middle of the abdomen, caṇḍavivṛddhaka in the region of the urinary bladder, and granthin in the umbilical region (4.2–4ab).²⁵² Gulma is said to be caused either by pitta and blood or by all three doṣas (4.8–9).²⁵³ The same chapter is concerned with the treatment of viṣūcikā (4.27–38).

Chapter five describes parasites (krimi) and disorders caused by them.²⁵⁴ Seven kinds of external and six kinds of internal parasites are distinguished; the latter are collectively called kiñcaka. The external worms are called kṣṇā yūkā (black louse), śvetā yūkā (white louse),²⁵⁵ carmayūkikā,²⁵⁶ bindukī,²⁵⁷ matkuṇā,²⁵⁸ śironivāsini (the head louse), and yaṣṭikā.²⁵⁹ The internal worms are called pṛthumuṇḍa,²⁶⁰ kiñcukasamṇibha,²⁶¹ dhānyāṅkuranibha,²⁶² sūkṣma, aṇu, and sūcimukha.²⁶³

Chapter six discusses the digestive fire (agni) and its three disorders. A slow fire (mandāgni) is attributed to an excess of vāta and kapha or of kapha singly (6.3cd and 7), an intensely active fire (tikṣṇāgni) to a deficiency of vāta and kapha (6.10).²⁶⁴ The latter disorder gives rise to an even more intensely burning fire, called bhasmaka,²⁶⁵ and a long series of diseases in its wake (6.11cd–13).²⁶⁶ A few verses at the end of the chapter (6.32–36) are about the treatment of anorexia (arocaka), not discussed as a separate disease in the *Hārītasamhitā*.

Chapter seven is about colicky pains (śūla).²⁶⁷ Ten types are described: three caused by one doṣa, three by a combination of two doṣas, one type accompanied by āma, one type devoid of āma, one arising from undigested food (ajīrṇānna), and one arising during the digestive process (pariṇāmaja).²⁶⁸ Two types are added to this series: one arising after the intake of food (bhuktopari),²⁶⁹ regarded as a variety of the kapha type, and one, arising after the digestion of the food, called pariṇāmaja again (7.13–16). A sāmīnipātika type is referred to in the verses on treatment (4.56–57).²⁷⁰

Chapter eight is concerned with pāṇḍuroga. Five types are distinguished: three caused by one doṣa, one by all three doṣas, and one called rūkṣaṇa (8.1–2); the rūkṣaṇa type is probably identical with the type arising from the eating of earth (8.11–14).²⁷¹

Chapter nine deals with kṣaya (91–102) and rājayakṣman (9.103–133). Kṣaya (a deficiency of one or more of the bodily constituents) is said to be ultimately caused by evil actions committed in previous existences (9.1–4), although the immediate causes of each type of kṣaya are separately listed. Ten types are distinguished: a deficient state of one of the three doṣas and of one of the seven bodily elements (9.5–7).²⁷² Specific prescriptions are given for each of these, to which are added a series of compound formulae.²⁷³ The second part of the chapter describes the mythical origin of rājayakṣman, its immediate causes, symptoms, and treatment. A particular number of symptoms is not mentioned,²⁷⁴ nor the involvement of the doṣas. Specific types of śoṣa (= kṣaya), comparable to those of the *Suśrutasaṃhitā*,²⁷⁵ are not described, but the causes of these disorders are referred to as giving rise to rājayakṣman (10.103–111).

Chapter ten, about raktapitta, agrees remarkably well with the *Carakasamhitā* (Ci.4) in the description of the aetiology and symptomatology. Eighteen complications of this disease are listed (10.16–18).²⁷⁶ Specific treatments are given for nosebleeds (10.35–41), bleeding from the mouth (10.42–50), raktātisāra (10.77–79), and bleeding from the female genitals (yonipravāha; 10.80–82).

Chapter eleven deals with arśas (haemorrhoids) and distinguishes five types,

caused by each of the three doṣas, all three doṣas, and blood, to which a sixth, congenital (sahaja) type is added.²⁷⁷ Polypous growths, or warts, subsumed under arśas, are mentioned as occurring in the nasal cavities, ears, oral cavity, and corners of the eyes (11.19).²⁷⁸

Chapter twelve is concerned with cough (kāsa; 12.1–45) and vomiting (chardi; 12.46–76). Eight types of kāsa are described: three types caused by one doṣa, one type each by vāta and pitta, kapha and pitta, saṁnipāta, blood, and kṣaya; a traumatic (kṣataja) type is added to this series (12.5–8).²⁷⁹ Vomiting is characterized as either snigdha or rūkṣa (12.56);²⁸⁰ five types are mentioned, caused by vāta, pitta, kapha, saṁnipāta, and parasites (krimi).²⁸¹

Chapter thirteen is about tṛṣṇā (thirst) and tāluṣoṣa (desiccation of the palate). Eight types of thirst are mentioned: brought about by vāta, pitta, kapha, of traumatic origin (kṣataja), caused by kṣaya, ajīrṇa (indigestion), dry foods (rūkṣasevana), and fever (13.1–3); types added to this series are caused by saṁnipāta (13.7), atisāra, and sūla (13.11).²⁸² The therapy of tāluṣoṣa is described (13.26–36), while its aetiology and symptoms are omitted.²⁸³

Chapter fourteen treats mūrchā (fainting) and some related disorders. The pathogenesis of this disease is described as an occlusion of the apertures (dvāra) of the five sets of twelve vessels (nāḍīkā) of the five sense organs, resulting in a sudden loss of consciousness (saṁjñānāśa). Six types of the disorder, also called moha, are distinguished, caused by vāta, pitta, kapha, blood, trauma (abhighāta), and alcoholic drinks (madya) or poison (14.1–6).²⁸⁴ Two more varieties, brought about by saṁnipāta and kṣaya, are referred to (14.13 and 15–16). Related disorders mentioned in this chapter are bhrama (giddiness), caused by pitta and vāta, tandra, caused by vāta and kapha, and nidrā (sleepiness), caused by kapha, vāta and tamas (14–17).²⁸⁵

Chapter fifteen deals with nidrānāśa (insomnia).²⁸⁶

Chapter sixteen discusses disorders resulting from the abuse of alcohol (madātyaya; 16.1–12) and some related illnesses. Alcoholic drinks are considered to be beneficial in certain cases, whereas their abuse is scorned. Four varieties of madātyaya are acknowledged, associated with vāta, pitta, kapha, and saṁnipāta.²⁸⁷ Disorders related to madātyaya and called mūrchā, moha or mada, caused by toxic plant products, are dealt with at the end of the chapter.²⁸⁸ Plants yielding these toxic substances are halinī,²⁸⁹ karavīra,²⁹⁰ madayantikā,²⁹¹ mohinī,²⁹² pūga,²⁹³ and unspecified bulbous plants (16.13–18). Worthy of attention is the absence of opium.

Chapter seventeen is about dāha (a burning sensation).²⁹⁴ A separate chapter on this disorder, absent from the *Carakaśaṁhitā*, *Suśrutasaṁhitā* and Vāgbhaṭa's works, forms part of the *Mādhavanidāna* (19), where it also follows upon the chapter on madātyaya. The types of dāha, described in the *Suśrutasaṁhitā*, are absent from the *Hārītasamhitā*.²⁹⁵

Chapter eighteen describes apasmāra (epilepsy) and its treatment. The verses on its pathogenesis (saṁprāpti), not very clear, ascribe it to the actions of a series of excited doṣas, namely vāta, pitta, kapha, udāna, and prāṇa (18.1–5). Types are not distinguished.²⁹⁶

Chapter nineteen is about unmāda (insanity). The types mentioned are those caused

by one doṣa, a combination of two doṣas, the three doṣas, and poison (19.1–2);²⁹⁷ descriptions of these types are absent. Intense emotions are recognized as factors contributing to the appearance of mental disorders (19.3–6).²⁹⁸ Possession is not referred to at all in this short chapter, exclusively devoted to insanity brought about by natural causes.²⁹⁹ The therapy of unmāda is said to be the same as that of apasmāra; the chapter on bhūtavidyā (III.55) is referred to for specific treatments (19.7).

Chapter twenty is devoted to vāta diseases. The total number of these diseases is said to be eighty-four, in contrast with the usual number of eighty (20.1).³⁰⁰ The five kinds of vāta are mentioned, followed by lists of the disorders they give rise to. Sixteen disorders affecting the head, caused by excitement of prāṇa, accompanied by pitta, are enumerated: śiraḥśūla, karṇaśūla, śaṅkhaśūla, aśṛggada, ardhāśīrṣavikāra, dinavṛddhisamudbhava(roga), nāsikopadrava, manyāstambha, hanugraha, jihvāstambha, tāluśūla, tamaka, bhrama, tandrā, śvāsa, and galaroga (20.4–6ab).³⁰¹ Udāna, accompanied by kapha, gives rise to the following sixteen disorders: hikkā, śvāsa, pariśvāsa,³⁰² kāsa, śoṣārti, ghaṇṭikā,³⁰³ hrllāsa, hrccūla, yakṛt, vātavami,³⁰⁴ kṣavathu, jṛṇbhaṇa, vaisvarya,³⁰⁵ pīnasa, aruci, and pratiśyāya (20.7–9).³⁰⁶ Vyāna causes disorders affecting the whole body (sarvāṅgaka), the symptoms of which vary according to the bodily element chiefly affected (20.10–14); the disorders caused by samāna are summarily described (20.15–17); these two groups are listed later on (20.31–34).

The chapter proceeds with the description of ākṣepaka, caused by vyāna,³⁰⁷ and apatantraka;³⁰⁸ the latter disease, called apratānaka by others,³⁰⁹ presents a number of varieties, called daṇḍāpratānaka,³¹⁰ snāyupratānaka,³¹¹ pratānaka,³¹² abhi-ghātasamudbhava,³¹³ and asthisandhisarṇṣuśaka³¹⁴ (20.18–26ab). The verses that follow are about four diseases: ekāṅgika,³¹⁵ pakṣaghāta,³¹⁶ tūni, and pratitūni³¹⁷ (20.26cd–30). The description of the disorders caused by the five kinds of vāta is resumed with a reference to twice sixteen of them brought about by vyāna, some of which are mentioned: hṛtstambha, prṣṭhastambha, ūrustambha, and gr̥dhrasī (20.31–32). The sixteen disorders caused by samāna are: śūla, gulma, udāvarta, ādhmāna, udāvarta again, pariṇāma, viṣamāgni, ajīrṇa, vātagulmaka, parikledī, rasaśeṣa, rasa, malavālaka, bandhī, bhedī, and vilāsī (20.33–34).³¹⁸ The sixteen disorders caused by apāna are: bhagandara, bastiśūla, meha, arśas, atikoṭhaka, the two līṅgadoṣas, gudabhrāṇṣa, gudaśūlaka, mūtrarodha, and virodha (20.35–36).³¹⁹ Some disorders arising from a combination of doṣas are added: vāta and pitta together bring about dāha, saṁtāpa, śoṣa, and mūrchā; vāta and kapha together produce śaitya, śopha, aruci, and jāḍya (20.37–38ab).

The last vāta disease described is ardita (facial paresis); three types are distinguished, brought about by vāta, vāta and pitta, vāta and kapha.³²⁰

Many vāta diseases which are described by Caraka, Suśruta and Vāgbhaṭa are not characterized in this chapter of the *Hārītasamhitā*.³²¹

Chapter twenty-one, devoted to āmavāta, is noteworthy, since the early saṁhitās do not deal with this disease. The *Mādhavanidāna* describes its aetiology and symptomatology in a separate chapter,³²² the *Mādhavacikitsā*³²³ and later treatises describe its treatment. The *Hārītasamhitā* distinguishes four types of āmavāta: viṣṭambhin, gulmakṛt or gulmāma, snehin āmavāta, and pakvāma, to which a fifth type,

sarvāṅgāma, is added (21.5–21).³²⁴

Chapter twenty-two is about ḡḡhrasī (sciatica), a disease usually described among the vāta diseases.³²⁵ The *Hārītasamhitā* may be the only treatise devoting a separate chapter to it. The varieties described and their doṣic involvement are remarkable too. The variety called koṣṭhaśīrṣikā, brought about by vāta and blood, presents a painful swelling of the knees;³²⁶ the second variety is ḡḡhrasī sensu stricto; the third variety, called pādahaṛṣa,³²⁷ is either connected with kapha and vāta or with pitta and vāta (22.1–6ab).

Chapter twenty-three describes vātarakta and its treatment. Special types and doṣic varieties are not distinguished.³²⁸

Chapter twenty-four, on amlapitta, is of importance in acknowledging this disease as a distinct entity. Caraka, Suśruta and Vāgbhaṭa do not regard amlapitta as a separate disorder, but it is described as such in the *Kāśyapasaṃhitā* and *Mādhavanidāna*,³²⁹ while the *Mādhavacikitsā* has a chapter on its treatment. *Hārītasamhitā* and *Mādhavanidāna* distinguish an upwards and a downwards moving type; the doṣic varieties of the *Mādhavanidāna* are not mentioned in the *Hārītasamhitā*.

Chapter twenty-five, on śopha (swelling, especially of inflammatory origin), does not present a clear classification. Types caused by one of more doṣas and by blood are mentioned, as well as types caused by kṣaya, kṣata (trauma), and other disorders; varieties affecting the upper, middle and lower part of the body, or the whole body, are referred to (25.1–10).³³⁰

Chapter twenty-six is the second chapter of the *Cikitsitasthāna* on gulma, a disease also discussed in chapter four. Five doṣic varieties are described, caused by vāta, pitta and kapha singly, pitta and kapha together, and samnipāta (26.1–8).³³¹ A type caused by blood and occurring exclusively in women, described by Caraka, Suśruta and Vāgbhaṭa, is referred to in a prescription (26.71–72) that does not make clear whether it was thought to be a gynaecological disorder. A type due to blood is moreover mentioned, together with a gulma of traumatic origin (kṣataja), in some stanzas on wholesome foods and drinks (pathya) in cases of gulma. Verses on the treatment of śopha are included in this chapter (26.62–70).

Chapter twenty-seven describes jalodara (ascites). Varieties are not mentioned, nor the involvement of the doṣas in this disease. The group of disorders called udara, to which jalodara belongs in āyurvedic literature,³³² is absent from the *Hārītasamhitā*. The surgical treatment of jalodara by means of a tube (jalanāḍī), through which the fluid accumulated in the abdominal cavity can be removed, is known to the *Hārītasamhitā* and considered to be a dangerous procedure (27.4–9).³³³

Chapter twenty-eight, on prameha (urinary disorders), agrees with the other major treatises in mentioning twenty types of this disease (28.1).³³⁴ In contrast with the early saṃhitās, the *Hārītasamhitā* does not specify which types are associated with each of the three doṣas; it refers to involvement of pitta and kapha, but omits vāta in the aetiology of prameha. Not all the twenty types of prameha are characterized or mentioned in prescriptions. Types discussed in the chapter are ḡḡṛta- or sarpir-, jala-, khaṭikā-, lavaṇa-, madhu-, pūya-, rakta- or rudhira-, rasa-, śarkarā-, śukra-, takra-, and vasāmeha. Names peculiar to the *Hārītasamhitā* are khaṭikāmeha,³³⁵ pūyameha,³³⁶ rasameha, and

takrameha.³³⁷ Unusual too is the term mūtraprameha (28.45).³³⁸ The chapter also describes the treatment of the pramehapiṭikās (28.26–35ab), without dealing with their names and characteristics;³³⁹ disorders mentioned in these verses are somapāka (28.33) and mehapāka (28.35ab).³⁴⁰

Chapter twenty-nine describes the treatment of mūtrakṛcchra without giving attention to its aetiology and symptoms. Chapter thirty contains verses on the therapy of mūtra(ni)rodha (retention of urine), the nidāna of mūtrakṛcchra, and the treatment of mūtrakṛcchra and mūtra(ni)rodha.³⁴¹

Chapter thirty-one describes āsmarī (vesical calculi) and its treatment. Some varieties are described without clearly delineating their origins and symptoms. Abnormal behaviour during sexual intercourse appears to be an important aetiological factor. Vāta and blood are involved too.³⁴² Śarkarā (urinary gravel) is referred to as a curable disorder of childhood.³⁴³ Surgical treatment is said to be described in the gṛhṭādhyaṃya of the Sūtrasthāna.³⁴⁴

Chapter thirty-two is about vṛṣaṇavṛddhi or aṇḍavṛddhi (swelling of the scrotum). Four doṣic types are mentioned, caused by vāta, pitta, kapha, and saṃnipāta.³⁴⁵

Chapter thirty-three on visarpa (erysipelas) distinguishes eight types, originating from one doṣa, two doṣas, blood, and saṃnipāta.³⁴⁶ The types connected with two doṣas, called ājñeya, granthika and kardama, are caused by vāta and pitta, pitta and kapha, vāta and kapha respectively.³⁴⁷

Chapter thirty-four is remarkable in describing a group of four diseases, collectively called upasarga, which means that they are regarded as infectious.³⁴⁸ Vāta and blood are thought to be involved in the causation of these disorders. The group consists of kṣudraka, antaka, ghora, and masūrikā. Kṣudraka, caused by pitta and blood, occurs in the season of spring and is characterized by pustules which resemble burns (agnidagdhatvat). Masūrikā is a disease with pustules which are round (vartula), like masūrikā (lentils); the pustules become festering and disappear within a short time (34.1–6). The verses on the treatment of these diseases begin with the advice to employ secret protective rituals (guptākāra rakṣāyogavidhāna) and to avoid contact with people belonging to the lower classes (34.7). Prescriptions against kṣudraka and ghora follow (34.8–17). The chapter proceeds with the description of an infectious fever (upasarga-jvara) with haematuria (raktamūtra) and diarrhoea (34.18–21). The chapter ends with counsels suitable in all cases of upasarga, now called kṣudrikā, and with rituals to be performed after recovery (34.22–26).

Chapter thirty-five, on ulcers (vraṇa), describes types associated with one doṣa, two doṣas, and saṃnipāta.³⁴⁹ Nāḍivraṇas (fistules) are referred to (35.1–9).³⁵⁰ The verses on treatment prescribe ointments and lotions; surgical treatment is a neglected topic (35.10–27).

Chapter thirty-six describes ślīpada (elephantiasis) and its four types, connected with vāta, pitta, kapha, and saṃnipāta.³⁵¹ A type affecting the fatty tissue (medas) in particular is called vālmīka (36.1–4ab).³⁵² The treatment of ślīpada is the same as that of vraṇa. The presence of a separate chapter on ślīpada in the *Hārītasamhitā* is a remarkable feature, in line with the *Mādhavanidāna*, which also deals with it separately.

Chapter thirty-seven may be unique in āyurvedic literature in being entirely de-

voted to arbuda, a local swelling of relatively large size.³⁵³ Four varieties are described, arising from vāta, pitta, kapha, and saṃnipāta.³⁵⁴

Chapter thirty-eight describes two diseases, gaṇḍamālā and lūtā(vraṇa).³⁵⁵ Four varieties of gaṇḍamālā are distinguished, brought about by vāta, pitta, kapha, and saṃnipāta (38.1–3). This is a unique feature, since gaṇḍamālā is not divided into a number of varieties in any other medical treatise.³⁵⁶ The disorder called lūtā is described as a deep ulcer (vraṇa) with a purulent discharge (pūyavisrāva) (38.14–16), while some small animal, the lūtā, is supposed to live inside (38.17–20).³⁵⁷ Seven kinds of lūtā are distinguished and characterized with regard to their form, colour and location: rohiṇī, viśadā, vijayā, (vi)bhedinī, kāntārī, vajrapuṣpā, and indrāyudhā (38.4–16). The treatment of lūtā(vraṇa) aims at curing the ulcer and killing the animal inside (38.17–23). The therapy of gaṇḍamālā is referred to in passing, together with an otherwise unknown disease called prakāṇṭaka (38.18).

Chapter thirty-nine is devoted to kuṣṭha. As usual in āyurvedic treatises, eighteen types are referred to (39.3), but these are not divided into two large groups.³⁵⁸ The list with the types of kuṣṭha comprises only fourteen items: kapālaka,³⁵⁹ udumbara, dadrumaṇḍala(ka), visarpaka, hastibala,³⁶⁰ kiṇa, gojihvaka, (lohita)maṇḍala, vaipā-dika,³⁶¹ carmadala, visphoṭaka, bahuvaraṇa, kaṇḍū, and vicarcī³⁶² (39.5–6). Two more types are referred to in the verses on treatment: citrakuṣṭha (39.59) or citraka (39.54), and pāmā (39.47 and 49); the two remaining types are not mentioned in the chapter. Hārīta's visarpaka, hastibala or gajacarman, kiṇa, gojihvaka and kaṇḍū do not occur in the lists found in other works; the nature of visarpaka remains unclear, but gajacarman is the equivalent of what is commonly called carmakakuṣṭha,³⁶³ kiṇa of kiṭima,³⁶⁴ gojihvaka of ṛṣyajihvaka,³⁶⁵ bahuvaraṇa of śatāruṣka,³⁶⁶ kaṇḍū of alāsaka.³⁶⁷ Kuṣṭha types mentioned in many āyurvedic texts and absent from the *Hārītasamhitā* are ekakuṣṭha, kākaṇṭaka, puṇḍarīka, rakasā, sidhma, sthūlāruṣka, and śvitra.³⁶⁸

Twelve among the fourteen types listed in the *Hārītasamhitā* are characterized (39.7–12); the characteristics of kiṇa and carmadala are omitted. Signs brought about by the doṣas are enumerated, as well as the symptoms when one of the seven bodily elements is chiefly affected (39.13–18). The remaining part of the chapter is concerned with treatment.

Chapter forty is the first of a series of chapters belonging to the division of āyurveda called śālākya and describes diseases of the head (śīroroga). Types distinguished are those caused by vāta, pitta, kapha, blood (rakta), vāta and rakta, saṃnipāta, and parasites (krimi);³⁶⁹ pitta is thought to be the chief causative agent. Additional diseases of the head are ardhaśiṛṣa³⁷⁰ and dinavṛddhikara³⁷¹ (40.1–3). Absent are anantavāta³⁷² and śaṅkhaka.³⁷³ Upaśiṛṣaka³⁷⁴ is mentioned in the verses on treatment.

Chapter forty-one describes a disease that is peculiar to the *Hārītasamhitā*. This disease, called bhrūdoṣa, is caused by excessive reading and looking at minute or distant objects. Vāta, pitta and blood are involved in it. The disorder is characterized by pains in the region of the eyebrows (bhrū) and eye complaints (41.1–3).

Chapter forty-two is about diseases of the nose (nāsāroga), caused by one of the doṣas, blood, and parasites (krimi).³⁷⁵

Chapter forty-three constitutes the only example known in āyurvedic literature of

a chapter entirely devoted to indralupta (balaness), also called khallātaka.³⁷⁶ Five varieties are mentioned, caused by vāta, pitta, kapha, blood, and saṃnipāta.³⁷⁷

Chapter forty-four is concerned with diseases of the ears (karṇaroga). Types distinguished are those caused by one of the three doṣas, a combination of two doṣas, all three doṣas, parasites (krimi), ulcers (vraṇa), a trauma (abhighāta), a wound (kṣata), and lūtidoṣa. A type occurring in childhood is mentioned as well (44.1–6). Karṇaśūla is referred to in the verses on treatment (44.11).³⁷⁸

Chapter forty-five deals with eye diseases (netraroga), distinguished into types arising from vāta, pitta, kapha, blood, two doṣas, and all three doṣas (45.1–5).³⁷⁹ Four types of inflammation (puṣpa) are described, caused by vāta, pitta, kapha, and saṃnipāta (45.14–18). Specific eye diseases mentioned in passing are timira, kaṇḍū, paṭala, arbuda, rātryandhya (45.20), kāca, and nilikā (45.21),³⁸⁰ as well as disorders caused by wounds (kṣata), a trauma (abhighāta), grief, and burns (45.21). Five varieties of cataract (paṭala) are characterized, associated with vāta, pitta, kapha, blood, and saṃnipāta.³⁸¹

Chapter forty-six, the last one on śālākya, describes the diseases of the oral cavity (mukharoga). Diseases of the lips (oṣṭharoga) are attributed to vāta, pitta and blood (46.1–4),³⁸² diseases of the teeth to vāta, pitta, kapha, blood and parasites (46.5–8),³⁸³ diseases of the tongue to vāta, pitta, kapha, blood, and saṃnipāta (46.17–25),³⁸⁴ a disease of the uvula or larynx (ghaṇṭikā) to kapha (46.26), a disease of the root of the tongue and pharynx (kaṇṭhasandhi) to kapha and blood (46.27–28ab); bleeding from a granthi in the throat is also referred to (46.28cd–30ab).³⁸⁵ The chapter ends with a description of galaśuṇḍikā and its treatment (46.33–39).³⁸⁶

Chapter forty-seven is about vājīkaraṇa (aphrodisiacs). Several types of klaibya (impotence) are described without an adequate characterization. Types mentioned are those caused by suppression of the sexual urge (nirodha), excessive intercourse (ativyavāya), old age (vayas), mental disorders (the mānasa type), deficiency of the semen (retaḥkṣaya), and a constitutional abnormality (sahaja).³⁸⁷

Chapter forty-eight, the first of a series on gynaecology and obstetrics,³⁸⁸ deals with infertility (vandhyātva) in women. Six types are distinguished: one type caused by intercourse before puberty, four types called kākavandhyā, anapatyā, garbhasrāvī, and mṛtavatsā, and one type caused by weakness (balakṣaya, dhātukṣaya) (48.1–8).³⁸⁹ Characteristics of these types are not given.³⁹⁰ Doṣic types of infertility are also described (48.13–25).³⁹¹

Chapter forty-nine describes dietary rules during the ten months of pregnancy (garbhopacāra)³⁹² and the handling of the longings of pregnant women (dohada).³⁹³

Chapter fifty is about the treatment of abortion, immature and premature birth (calitagarbha), which may occur during the first to eighth months of pregnancy. Chapter fifty-one describes the treatment of eight disorders occurring during pregnancy: hrllāsa (nausea), chardi (vomiting), śoṣa (emaciation), jvara, śoṭha, aruci, vivarṇatva (an abnormal colour of the skin), and atisāra (51.1).³⁹⁴ Additional disorders mentioned are vibandha, vidradhi, mūtrarodha (51.10–11), and garbhacāla (abortion) (51.12).

Chapter fifty-two is concerned with mūḍhagarbha (malposition of the foetus) (51.5–8)³⁹⁵ and mṛtagarbha (death of the foetus) (51.9–10).³⁹⁶ Varieties of mūḍhagarbha associated with one, two and three doṣas are described (52.1–8), as well as disorders

caused by blood and pitta (52.15). Mūdhagarba is treated with drugs and by means of surgical procedures (52.11–17).³⁹⁷ The chapter contains some prescriptions assuring a safe delivery (52.18–21),³⁹⁸ and two mantras having the same end in view (52.22–23 and 26–28); a yantra is also described (52.24–25).³⁹⁹ One of the mantras refers to a Rā-kṣasī, called Surasā, living in the Himālayas, the sound of whose ankle bells (nūpura) guarantees an uncomplicated parturition.

Chapter fifty-three describes the regimen of a woman in childbed (sūtikopacāra);⁴⁰⁰ some rituals to be performed on behalf of the child are also mentioned: jātaka (= jātakarman),⁴⁰¹ nāmakarman,⁴⁰² karṇavedhana,⁴⁰³ vastrabandha,⁴⁰⁴ and vivāha (the marriage ceremonies) (53.6–7).⁴⁰⁵

Chapter fifty-four deals with children's diseases (bālaroga). The child's health may be affected by five disorders of the breastmilk (kṣīradoṣa): ghana-, uṣṇa-, amla-, alpa-, and kṣārakṣīra (54.1–7).⁴⁰⁶ One of these, ghanakṣīra, may give rise to the disease called utphullikā or utphullakukṣitā (54.3 and 9–13).⁴⁰⁷ The chapter proceeds with verses on a long series of ailments that may occur in children and their treatment (54.14–30). The last part of the chapter describes disorders caused by the attacks of female demons (Pūtanā) and the appropriate rituals to appease them (54.31–54).⁴⁰⁸ The verses on this subject, which may be quoted from a *Kaumāratantra*, mention two series of eight of these malignant beings, who seize a child on the first to eighth day of its life. Their names are Lohitā, Revatī, Dhvāṅkṣī or Vāyasī, Kumārī, Śākunī, Śivā, Ūrdhvakeśī, and Senā, or Rohiṇī, Vijayā, Kālī, Kṛttikā, Dākinī,⁴⁰⁹ Nisā, Bhūtakeśī, and Kṛṣṇāṅgī.⁴¹⁰ The second series of names is absent from the verses on treatment.

Chapter fifty-five is concerned with bhūtaavidyā (demonology)⁴¹¹ and describes malignant beings (graha) able to cause possession syndromes (āveśa). Ten of these beings,⁴¹² called grahanāyaka, are mentioned, together with the symptoms, both physical and mental, they bring about (55.2–18): Aindra, Āgneya, Yama, Nairṛta, Vāruṇa, Māruta, Kubera or Yakṣarāj, Aiśānya, Grahaka, and Paisācika. The treatment of the disorders caused by these grahas is of a mixed character and consists of drugs, rituals, and mantras (55.19–28).

Poisons and the treatment of poisoning (viṣatantra) constitute the subject of chapter fifty-six. Eight kinds of poison of vegetable origin are described: śṛṅgika, vatsanābha, śāriṅgavera or śāriṅgavairika, dāraka, kālakūṭa, śaṅkha, satsukanduka, and hālāhala, which can be distinguished by their colour (56.1–5ab).⁴¹³ The treatment of poisoning consists of the administration of drugs, accompanied by mantras (56.5cd–17). Eight types of poisonous animals are listed, together with the symptoms caused by their bites: darvīkara, maṇḍalin, rājīmant, guṇḍasa, vṛścika, goraka, khaṇḍabinduka, and a group consisting of alarka, mūṣa and mārjāra (56.18–24). The treatment is of a composite character again (56.25–31).⁴¹⁴

Chapter fifty-seven deals with surgical subjects and describes wounds and fractures, together with their treatment (57.1–13). Eight types of trauma are distinguished: chinna, bhinna, bhagna, ghr̥ṣṭa, piṣṭa, āsphālita, saṃprahāra, and saṃghāta.⁴¹⁵ The removal of foreign bodies (śalyoddhāra) is the next subject (57.14–28). Two sets of twelve surgical instruments are enumerated. The twelve blunt instruments (yantra) are: prabandha (bandages), godhāmukha,⁴¹⁶ vajramukha,⁴¹⁷ saṃdamśa,⁴¹⁸ cakrā-

kr̥ti,⁴¹⁹ kaṅkapāda,⁴²⁰ ānaka,⁴²¹ śṅgaka,⁴²² kuṇḍala,⁴²³ śrīvatsa,⁴²⁴ sauvasika,⁴²⁵ and pañcavaktra;⁴²⁶ the twelve sharp instruments (śastra) are: ardhacandra,⁴²⁷ vr̥himukha,⁴²⁸ kaṅkapattra,⁴²⁹ kuṭhārikā,⁴³⁰ karavīrakapattra,⁴³¹ śalākākārapattraka,⁴³² baḍiśa,⁴³³ gr̥dhrapāda,⁴³⁴ śūlin,⁴³⁵ and ghanamudgara⁴³⁶ (57.16–20).⁴³⁷ The remaining part of the chapter (57.29–46) is about the treatment of fractures (bhagna) and wounds.

Chapter fifty-eight describes burns caused by cauterization (agnidagdha) and their treatment. Four types are distinguished: īśaddagdha, madhyadagdha, atidagdha, and samyagdagdha (58.1–5ab).⁴³⁸ The chapter ends with a verse on the treatment of a complication (upaghāta) resulting from the injudicious employment of smoking (dhūmapāna) for medicinal purposes.

Chapter one of the Sūtrasthāna is on weights and measures (tulāmāna). Two systems are described; the first system resembles the kālīṅga, the second the māgadhamāna.⁴³⁹ The average quantities to be prescribed of a series of medicinal substances are mentioned.

Chapter two is about the different types of medicated oils and their indications (tailapākavidhi). Four types of preparation are distinguished: khara-, cikkaṇa-, madhya-, and viśoṣipāka.⁴⁴⁰

Chapter three is about the application of medicated clysters (nirūhabastikarman).⁴⁴¹

Chapter four, about sudation (svedana) and its indications, mentions seven types: loṣṭa-, bāṣpa-,⁴⁴² agni-jvālā-, ghaṭī-,⁴⁴³ jala-,⁴⁴⁴ phala-, and vālūkāsveda.⁴⁴⁵ This list differs from a previous one with thirteen items (III.2.142–145).

Chapter five describes four methods of bloodletting (raktāvasacana): venesection (śirāvivrecana), drawing of blood by means of gourds (alābu), horns (śṅga), and leeches (jalaūkā) (5.1–4).⁴⁴⁶ The chapter ends with a verse on the characteristics of corrupted blood (5.5).

Chapter six describes the drawing of blood by means of leeches. Four kinds of leeches are distinguished: indrāyudhā, rohiṇī, kālīkā, and dhūmrā.⁴⁴⁷ The dhūmrā leech is the only one that can safely be applied by physicians.

Chapter one of the Kalpasthāna describes the mythical origin, tastes, and other properties of harītakī. Seven varieties are distinguished: vijayā, rohiṇī, pūtanā, amṛtā, cetakī, abhayā, and jīvanti. The appearance, colour, location, and uses of each variety are enumerated.⁴⁴⁸ The subject is resumed in chapter three.

Chapter two is about the uses of triphalā.⁴⁴⁹

Chapter three (harītakīkalpavarṇanabheda) continues the discussion of the varieties of harītakī and their uses. Two varieties of cetakī, a black and a white one, are distinguished.⁴⁵⁰

Chapter four (rasanakalpa) is concerned with the mythical origin, properties and uses of garlic (rasana, laṣuna).⁴⁵¹ Garlic owes its origin to some drops of the amṛta, fallen from the beak of Garuḍa, who stole a portion of it during the churning of the ocean. It is described as a rejuvenating substance, forbidden to brāhmaṇas.

Chapter five describes guggulu and its uses.⁴⁵² This substance is said to derive from trees growing in desert regions (marubhūmi) and in the Himālayas. It should be collected in deserts in summer and in the mountains in winter.

The only chapter of the Śārīrasthāna treats subjects usually discussed in a Śārīrasthāna, but its main emphasis is on embryology. The human body is said to be composed of the five mahābhūtas, five sense organs, seven elements (dhātu), ten kinds of vāta⁴⁵³ (1), and three guṇas (2); the three guṇas are jīva, manas and ākāśa.⁴⁵⁴ The four stages of the human life cycle are called hāla, prauḍha, pragalbha, and sthāvira (3).⁴⁵⁵ Verses on female physiology introduce the section on embryology. A series of factors are enumerated which result in the experience of sexual pleasure during intercourse: dhātubala gives rise to sattva, sattva to rajas, rajas to kāma (the sexual urge), kāma to surata (orgasm) (7). Menstruation (ṛtu) takes place during the first seven days of each cycle;⁴⁵⁶ after this period a woman is called ṛtumatī (8–9). Conception is the result of the union of the male semen (bīja) and female rajas; both fluids are a form of śukra or retas (16). The male and female roles in conception are compared to those of Śiva and his Śakti (14–15).⁴⁵⁷

The embryological development is sketched in some detail (17–23). The stages described differ considerably from those found in other works.⁴⁵⁸ The birth of a boy or a girl is ascribed to a preponderance of either the male semen or the female rajas (26–27). The child born will be of a sāttvika, rājasa or tāmasa character, depending on the emotional state of the mother during impregnation (28–30). A series of constitutional characteristics is enumerated which are partly the same as those of the constitutions described in a previous chapter (1.5); the series of constitutions (prakṛti) of the Śārīrasthāna is remarkable, even unique, in including those brought about by the dominance of a combination of vāta and rakta, pitta and rakta, and kapha and rakta (31–36).⁴⁵⁹ Some subsequent verses (37–40) are about the conditions leading to the birth of a non-male-non-female (napuṃsaka) and the birth of twins (yamala). The remaining part of the chapter gives a second sketch of the development of the embryo, different from the preceding one, and a detailed account of the origin of the physical and mental components of the human organism, in which the various kinds of vāta, the mahābhūtas and the three guṇas (sattva, rajas, tamas) have a predominant role. The account disagrees in many respects with what is found in the other saṃhitās.⁴⁶⁰

The pariśiṣṭādhyaḥ, not present in all the MSS⁴⁶¹ and by some regarded as a later addition to the Hārītasamhitā,⁴⁶² refers to the Śārīrasthāna as embodying the teachings of Vyāsa. After listening to it, Hārīta went to the river Ganges (Svarṇadī) in order to bathe and meditate.

Those studying the śāstra, i.e. āyurveda, are said to enjoy health and to be delivered from all sins. The āyurveda, as venerable as a Veda, has originally been expounded by Brahmā, subsequently by Atri, as well as by Dhanvantari and the Aśvins. Other experts acquainted with it were Caraka, Suśruta and Vāgbhaṭa. The saṃhitā of Atri was authoritative in the Kṛtuguga, Suśruta's work in the Dvāpara, and Vāgbhaṭa's treatise in the Kaliyuga. Medical saṃhitās were also composed by Viṣṇu, the Aśvins, Garga, Mādhyaṇika,⁴⁶³ and Mārkaṇḍeya. The six (medical) sages are Agniveśa, Bheḍa, Jatūkarṇa, Parāśara, Hārīta, and Kṣīrapāṇi. The foremost authority, however, is Ātreya, whose position is equal to Ananta (i.e., Śeṣa) among the serpents and Śambhu among the gods.

Names of medicinal plants mentioned in the *Hārītasamhitā* that are absent from the

Brhatrayī are: ālūṣaka (I.16.16),⁴⁶⁴ arikā (III.2.61; 28.12),⁴⁶⁵ aṣṭahalī (III.2.96),⁴⁶⁶ balādanī (I.16.14),⁴⁶⁷ bhīru (III.47.16 and 52.19),⁴⁶⁸ bhīruka (III.18.14),⁴⁶⁹ bhīrukā (III.48.28),⁴⁷⁰ bila (III.51.8),⁴⁷¹ cāpamardaka (I.16.16),⁴⁷² cārīnī (III.28.19),⁴⁷³ cavilā (III.12.43), dāraka (III.56.2 and 3), dhara (III.4.25),⁴⁷⁴ gajabalā (III.2.126), gavādanī (III.18.24),⁴⁷⁵ gavāstanī (III.12.32),⁴⁷⁶ guruvṛkṣaka (I.7.2),⁴⁷⁷ hastikanda (I.16.34 and 39),⁴⁷⁸ indrā (III.28.15),⁴⁷⁹ kaithaka (III.18.26),⁴⁸⁰ kañcaṭa (III.20.86), kaṇḍū (I.15.14),⁴⁸¹ kaṇṭaka (III.33.11),⁴⁸² kaphādani (I.16.13),⁴⁸³ karaha (I.17.5 and 8),⁴⁸⁴ kaṭāhaka (I.17.12),⁴⁸⁵ kokilāhvaya (III.7.56),⁴⁸⁶ kokilākhyā (III.40.17),⁴⁸⁷ koṭaja (III.2.116),⁴⁸⁸ kuberākṣa (III.7.58),⁴⁸⁹ kumbhā (III.2.61),⁴⁹⁰ kumedhikā (III.18.9),⁴⁹¹ kuṇḍalī (III.2.54; 3.92),⁴⁹² mācikā (III.6.35),⁴⁹³ māṇa (I.19.4),⁴⁹⁴ mahācāvala (I.5.55),⁴⁹⁵ mahatpicumanda (III.11.53),⁴⁹⁶ mahāvibhīṭaka (III.45.28), mallī (III.11.95),⁴⁹⁷ methikā (I.16.8),⁴⁹⁸ mohinī (III.16.17),⁴⁹⁹ murāmāmsī (III.9.98; 21.29),⁵⁰⁰ nāgavallī (I.17.29),⁵⁰¹ nṛṭṭaka (III.31.9),⁵⁰² palāśabheda (III.54.17),⁵⁰³ payadantī (III.11.31),⁵⁰⁴ rudrajaṭā (III.10.66),⁵⁰⁵ śakrāhva (III.2.66; 28.20),⁵⁰⁶ śaṇaghaṇṭikā (III.18.35),⁵⁰⁷ śārṅgavairika (III.56.1),⁵⁰⁸ śārṅgavera (III.56.3),⁵⁰⁹ satsukanduka (III.56.2 and 4),⁵¹⁰ siṃhamukhī (III.15.5),⁵¹¹ śītāśivā (III.43.5),⁵¹² sitāvarṣā (II.7.3),⁵¹³ śṛṭaka (III.18.14),⁵¹⁴ suparṇā (III.5.30), suparṇikā (III.15.6),⁵¹⁵ sūryakāntī (III.52.18),⁵¹⁶ śvetādrīkarṇī (III.48.21), tāmbūlaparṇa (I.16.33),⁵¹⁷ tantuka (III.2.103),⁵¹⁸ tulasī (III.2.136; 4.35; 12.36), tulasikā (III.12.33), tuṇḍī (I.16.17),⁵¹⁹ tuṇḍīra (I.16.23),⁵²⁰ tuṇḍīraka (III.6.35; 11.108), vālmikā (I.17.2),⁵²¹ vanakesara (III.9.97),⁵²² vāstukarṇī (III.52.14),⁵²³ vasudhā (III.10.52),⁵²⁴ vāsumantī (III.18.25),⁵²⁵ vejikā (I.16.8),⁵²⁶ vikacā (III.6.19),⁵²⁷ vṛddhadantī (III.18.25),⁵²⁸ and yugandhara (I.11.6; 23.3).⁵²⁹

Mercury may be mentioned once (III.55.21: pārada).

Date

The *Hārītasamhitā* that is known to us from MSS and some editions is sometimes regarded as entirely different from a much earlier treatise of the same name. The later text is for that reason referred to as Pseudo-*Hārītasamhitā* and its author is called Hārīta II to distinguish him from Hārīta I or Vṛddhahārīta.⁵³⁰ The main reason for this distinction was the small number of quotations from Hārīta (and Ātreya) that can be traced in the printed versions of the *Hārītasamhitā*. The number of traceable citations is, to be sure, restricted, but proves to be larger than was formerly assumed. Consequently, the relationship between an old version and the one preserved is more complicated than presumed by those who consider Hārīta I and II to be altogether distinct.

The date of the old version of the *Hārītasamhitā* cannot be determined with any precision. Clues to the period to which the printed text belongs are, on the other hand, not scarce at all.

The *Hārītasamhitā* contains one verse that is found in Ravigupta's *Siddhasāra*, a work that dates from about A.D. 650.⁵³¹ Ravigupta's verses are of his own making and not borrowed from predecessors, which establishes that the *Siddhasāra* is earlier than the *Hārītasamhitā*. This fact is in conformity with the appearance of Vāgbhaṭa's name in the parīśiṣṭādhyāya, although this chapter may be a later addition. Some more features that may be interpreted as pointing to influences from the side of Vāgbhaṭa

consist of the description of *mada* in the chapter on *madātyaya* and the description of the disease called *upaśīrṣaka*, recognized by Vāgbhaṭa, but absent from the *Caraka-* and *Suśrutasaṃhitā*. The presence of separate chapters on *śūla* (III.7), *nidrā* (III.15), *āmavāta* (III.21), *amlapitta* (III.24) and *vṛddhi* (III.32), in line with the arrangement found in the *Mādhavanidāna*, is in favour of placing the *Hārītasamhitā* in about the same period, i.e., the eighth century. The question whether or not the *Hārītasamhitā* is posterior to Mādhava's work remains problematic, since both works may partially be based on the same sources.⁵³² In addition, there are considerable differences between the arrangement and the nosological system of *Hārītasamhitā* and *Mādhavanidāna*. The absence of verses on the examination of the urine and the pulse indicates that the *Hārītasamhitā* is anterior to Vaṅgasena's *Cikitsāsārasaṃgraha* and the *Śārṅgadharaṣaṃhitā*. The absence of prescriptions containing Cannabis corroborates this point.⁵³³

Plant names that may rather safely be taken as evidence pointing to a relatively late date of the *Hārītasamhitā* are *kañcaṭa*,⁵³⁴ *māḍa*,⁵³⁵ *murāmāṇsī*,⁵³⁶ *rudrajaṭā*,⁵³⁷ *tulasī*,⁵³⁸ and *yugandhara*.⁵³⁹

Somewhat later words found in the *Hārītasamhitā* are *bhājikā* (III.2.238), *mahācāvala* (I.5.55), and *pasāhī* (I.15.1).⁵⁴⁰ The references to Śiva and his Śakti (Śārīra 14–15) and to meditation on Śiva (*śivadyāna*; III.55.15) confirm that the work cannot be assigned to an early period.

The evidence taken together is in favour of placing the *Hārītasamhitā* in the period A.D. 700–1000.⁵⁴¹

Chapter 5

Mādhava

Mādhava¹ was the author of the *Rogavinīścaya* and, possibly, of the *Mādhavacikitsā*. His authorship of some other medical works is problematic.²

Contents of the *Rogavinīścaya* or *Mādhavanidāna*

The work called *Rogavinīścaya*³ by the author himself (1.2),⁴ but generally known as the *Mādhavanidāna*, is the earliest compendium on the group of five subjects collectively called *nidāna*, which consist of *nidāna* in its restricted sense (aetiology), *pūrvarūpa* (prodromes), *rūpa* (symptomatology), *upaśaya* (therapeutic diagnosis), and *saṃprāpti* (pathogenesis). The first chapter of the treatise is devoted to the characterization of these five concepts and a number of related issues, while the remaining sixty-eight chapters contain descriptions of the *nidāna*, *pūrvarūpa*, *rūpa* and *saṃprāpti*, and also in many cases the *upadravas* (complications) and signs indicating incurability (*asādhyalakṣaṇa*), of all the diseases recognized by Mādhava. The work ends with an enumeration of the diseases dealt with⁵ and two concluding verses.

The *Mādhavanidāna*, which contains about 1,530 verses, is primarily a work that draws upon earlier treatises,⁶ chiefly the *Carakasamhitā*, *Suśrutasamhitā*, and *Aṣṭāṅgahṛdayasamhitā*. Sources of minor importance are the *Aṣṭāṅgasamgraha*⁷ and Ravigupta's *Siddhasāra*.⁸ As not all the verses can be traced to these five works, Mādhava must have utilized some still unidentified or lost earlier texts, while, moreover, he may have composed parts of his treatise himself. The fact that Mādhava made use of unidentified treatises is attested by some verses which derive from texts vaguely referred to as 'another book' by the commentators on the *Caraka*- and *Suśrutasamhitā*.⁹ Moreover, the first verse of the chapter on *bhagna* (44.1), which looks like a quotation, consists of the answer by an unnamed authority, who may be Ātreya, to a question put by *Hutāśa* (= *Agniveśa*); 44.2–7 may be from the same unknown source, which is not the *Carakasamhitā*.¹⁰

In spite of its compilatory character, the *Mādhavanidāna* is an important treatise. Verses on *nidāna* – scattered over several sections of the works of Caraka, Suśruta and Vāgbhaṭa – have not only been collected in it, but also selected and arranged so as to form coherent descriptions of diseases. In some cases Mādhava failed in organizing his matter carefully, thus making the seams of his patchwork stand out clearly.¹¹

The majority of the chapters of the *Rogavinīścaya* are made up of verses from more than one source, but exceptions are not infrequent.¹² The stanzas chosen by Mādhava not only show variants, but are sometimes loosely related to the corresponding accepted readings of Caraka, Suśruta and Vāgbhaṭa, or they even consist of alternative readings recorded as such by the commentators.¹³ Descriptions of disorders occurring in the *saṃhitās* in prose appear in a versified form in Mādhava's work.¹⁴ Sometimes verses based on prose passages from the *Suśrutasaṃhitā* are preferred to stanzas on the same subject found in Vāgbhaṭa's works.¹⁵

A few chapters may have been written, partly or completely, by Mādhava himself,¹⁶ unless they have been taken from an unknown text. Odd verses from an unknown source or by Mādhava are far from rare.¹⁷

A major contribution of Mādhava is the new order in which the diseases were arranged by him. A similar attempt had already been made by Ravigupta, but it was Mādhava's scheme that became standard and was adopted by a large number of later authors.

The *Rogavinīścaya* is concerned with six out of the eight divisions (*aṅga*) of āyurveda; *rasāyana* and *vājīkaraṇa*, being subjects connected with treatment, are left out of consideration. The six divisions represented are *kāyacikitsā* (chapters 2–19, 22–37, 49–54), *bhūtavidyā* (chapters 20–21), *śalya* (chapters 38–48 and 55), *śālākya* (chapters 56–60), *kaumārabhr̥tya* (chapters 61–68), and *agadatantra* (chapter 69). The reasons for this particular manner of arranging the material remain obscure.

The creation of this new alignment was facilitated by dividing the book into a rather large number of chapters as compared with the corresponding parts of the *saṃhitās* of Caraka, Suśruta and Vāgbhaṭa, which often describe groups of diseases, sometimes rather distantly related, in one single chapter. Examples illustrating Mādhava's procedure are the separate chapters on *dāha* (a syndrome characterized by a burning sensation; 19),¹⁸ *nāḍivraṇa* (fistulas; 45),¹⁹ *upadaṃśa* (affections of the male member; 47),²⁰ *visarpa* (erysipelas; 52),²¹ *aśṛgdara* (menorrhagia and metrorrhagia, as well as fluor; 61),²² and *stanaroga* (diseases of the mammary glands; 66).²³ The reverse procedure is also adopted; the *Mādhavanidāna* contains a small number of new clusters: *nidrā* (excessive sleepiness) and *tandrā* (lassitude) occur in the same chapter (17) as *murchā* (fainting) and *saṃnyāsa* (prolonged loss of consciousness);²⁴ *ānāha* (obstructive abdominal swelling) is described along with *udāvarta* (a group of disorders arising from restraint of the natural urges; 27).²⁵

Mādhava's inventiveness in arranging the disorders also appears from the changed order of the members of groups of disorders, in comparison with their order in the sources. Examples are found in the chapters on *galagaṇḍa* (goitre), etc. (38),²⁶ and *netraroga* (eye diseases; 59). The composition of these groups does not always tally with that found in the works of Caraka, Suśruta and Vāgbhaṭa, since the author of the *Rogavinīścaya* made his own decisions. An example is the group of disorders known as *upadaṃśa*, which has been enlarged by adding *liṅgavartī*, also called *liṅgārśas* (warts on the penis; 47.6–7).²⁷ In the chapter on *kṣudrarogas* (55)²⁸ he adopts the order of the *Suśrutasaṃhitā*, but diminishes the number of these diseases from forty-eight²⁹ to forty-three by leaving out *visphoṭaka*, *pāmā*, *vicarcī*, *rakasā*,³⁰ *masūrika*,³¹ and *carma-*

kīla, ³² and adding a new item, śūkaradaṃṣṭraka. ³³ The chapter on mukharoga (diseases of mouth and throat; 56), mainly based on Suśruta, adds the disease karāla (56.20), described by Vāgbhaṭa. ³⁴ The chapter on bālaroga (children's diseases; 68) contains descriptions of pārigarbhika (68.10–11) ³⁵ and mahāpadma (68.14–15ab), ³⁶ borrowed from the *Aṣṭāṅgasamgraha*.

Special features of the *Rogavinīścaya* or *Mādhavanidāna* ³⁷

A notable and substantial contribution of Mādhava consists of his description of new diseases absent from earlier works, and the development of some disorders which are only sketchily characterized or not recognized as fully independent diseases by his predecessors into autonomous nosological entities. These innovations became highly influential and were almost universally acknowledged by later writers.

Two disorders recognized as independent entities for the first time by Mādhava are śūla (piercing, colic-like pain; 26) ³⁸ and visphoṭa (diseases in which vesicles or blisters appear; 53). The *Suśrutasamhitā* deals with śūla in its chapter on the treatment of gulma (visceral swelling), where it is in the first place regarded as a secondary affection in cases of gulma (U.42.66cd–69ab), and secondly as an autonomous disease (U.42.73cd–88a). Mādhava's chapter on śūla, made up of twenty-two verses which may have been composed by himself, precedes that on gulma (28), ³⁹ and does not contain a single statement on a relationship between the two. The disease called visphoṭa is not absent from the classical samhitās, but is only cursorily referred to there as forming part of a group of disorders. The *Carakasamhitā* mentions it in the chapter on śvayathu (inflammatory swellings; Ci.12.90cd), together with kakaṣāḥ (herpes zoster) and other skin eruptions, while Suśruta (Ni.13.18) and Vāgbhaṭa (A.h.U.31.9ab = A.s.U.36.9) regard it as one of the kṣudrarogas. ⁴⁰ Mādhava gives the disorder an independent status, and devotes a separate chapter to it, consisting of eleven verses, which, with one exception, may be of his own making.

The new diseases appearing for the first time in the *Mādhavanidāna* are: ānavāta (25), pariṇāmaśūla and annadravaśūla (26.15cd–22), medoroga (34), śītapitta (50), amlapitta (51), masūrīkā (54), śūkaradaṃṣṭraka (55.55), kuñcana (59.96), pakṣmaśāta (59.99), and yonikanda (63).

The disease called ānavāta ⁴¹ (often equated with rheumatoid arthritis) ⁴² is described in a separate chapter of twelve verses which may have been composed by Mādhava. The *Hārītasamhitā* (III.21) described it in its own manner, independently of Mādhava. The disorders called pariṇāmaśūla (a type of śūla manifesting itself during the digestion of food) and annadravaśūla (which may appear during the digestive process or precede or follow it), which are unknown in earlier medical treatises, ⁴³ are dealt with in the chapter on śūla as varieties of this disease. Medoroga (obesity) ⁴⁴ is characterized in four verses, which may again be by Mādhava; these verses are followed by five śloka from the *Carakasamhitā* (Sū.21.5–9). Mādhava made medoroga into a nosological entity, whereas it was Caraka's aim not to characterize a disease in its own right, but an undesirable condition leading to afflictions of various kinds. An illness called śītapitta (urticaria), ⁴⁵ not recorded in the classical samhitās, is

described by Mādhava in a short chapter of six verses, the first five of which may be his own, whereas the sixth has been borrowed from Vāgbhaṭa (A.h.U.31.32–33ab = A.s.U.36.30).⁴⁶ Three disorders closely related to śtipitta according to Mādhava's arrangement, namely udarda (a special form of urticaria), koṭha (an exanthematous, itching eruption), and utkoṭha (a disorder resembling koṭha), are discussed in the same chapter, thus forming a new cluster of Mādhava's making.⁴⁷ The term amlapitta usually denotes a symptom in the classical saṃhitās, not a separately described nosological entity.⁴⁸ Mādhava regards it as an independent disease (corresponding to a dyspepsia, accompanied by vomiting and diarrhoea or spitting of blood), characterized in a separate chapter of twelve verses, which may be his own. The chapter on amlapitta of the *Hārītasamhitā* (III.24) has possibly been influenced by the *Mādhavanidāna*, whereas that of the *Kāśyapaśamhitā* (Khila 16) appears to be original. The chapter on amlapitta of the *Rogavinīścaya* ends with a verse on a related disorder, śleśmapitta, but, since the commentators are silent on it, it can safely be assumed to be a later interpolation.⁴⁹

Very important is the fact that Mādhava is the earliest author to give a detailed description of masūrikā (smallpox, chicken pox, and other infectious, eruptive fevers). A disorder of this name is briefly mentioned in a single verse of the chapter on śvayathu of the *Carakasamhitā* (Ci.12.93), together with romāntikā (Ci.12.92), related to masūrikā, whereas Suśruta (Ni.13.38) and Vāgbhaṭa (A.h.U.31.8 = A.s.U.36.8) regard masūrikā as one of the kṣudrarogas. The *Kāśyapaśamhitā* deals with masūrikā in a verse at the end of the chapter on visarpa (Khila 14), while the *Hārītasamhitā* (III.24) considers it to be a variety of contagious piḍakās (pustules).⁵⁰ The *Mādhavanidāna* has a chapter of thirty-one verses, probably by Mādhava, on masūrikā and its various types, among which romāntī figures.⁵¹

The disorder called śukaradaṇṣṭraka⁵² was added by Mādhava to the group of kṣudrarogas. The *Mādhavanidāna* describes seventy-eight eye diseases, as opposed to the seventy-six of the *Suśrutasaṃhitā*, by adding two diseases of the eyelashes, called kuñcana⁵³ and pakṣmaśāta.⁵⁴ Śrīkaṇṭhadatta claims in his comments that kuñcana was borrowed from some other treatise, while pakṣmaśāta⁵⁵ is equated by this commentator with kṛcchronmīla of Vāgbhaṭa (A.h.U.8.3–4 = A.s.U.11.4–5).⁵⁶ The short chapter of four verses on yonikanda may have been composed by Mādhava. This disease, especially prevalent in elder women according to Śrīkaṇṭhadatta in his comments, probably corresponds to a prolapse of the vagina or uterus.⁵⁷

The group of puerperal disorders (65; sūtikāroga) is an innovation of Mādhava; it consists of āṅgamarda, jvara, kampa, pipāsā, gurugātrātā, śoṭha, śūla, and atisāra.⁵⁸

One of the diseases not described in the *Mādhavanidāna* is a disease of the head, called upaśīrṣaka;⁵⁹ tuṇḍi, a children's disease, is also absent,⁶⁰ as well as the term bradhma.⁶¹

Several editions of the *Mādhavanidāna* contain additional verses, ignored in the *Madhukośa*. Some stanzas added to the end of the chapter on grahaṇī describe the varieties called saṃgrahagrahaṇī⁶² and ghaṭīyantragrahaṇī.⁶³

Quotations from and references to the *Rogavinīścaya* or *Mādhavanidāna*

Mādhava, the author of the *Mādhavanidāna*, is quoted by Āḍhamalla,⁶⁴ Āsubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Gaṇanāthasena in the auto-commentary on his *Siddhāntanidāna*,⁶⁵ Gopāladāsa in the *Cikitsāmṛta*,⁶⁶ Jayaratna in the *Jvaraparājaya*, Jīvānandavidyāsāgara in his commentary on the *Rasendrasārasaṃgraha*, Nāganātha in the *Nidānapradīpa*, Nārāyaṇa in the *Jvaranirṇaya*,⁶⁷ Nīscalakara in the *Ratnaprabhā*,⁶⁸ Sukhānanda in his commentary on Lolimbarāja's *Vaidyājīvana*,⁶⁹ and in the *Yogaratanākara*.⁷⁰

Mādhava is mentioned in the *Haṇṣarājānidāna*, Herambasena's *Gūḍhabodhasaṃgraha*, Trimalla's *Vaidyacandrodaya*,⁷¹ Vācaspati's commentary on the *Mādhavanidāna*,⁷² and Vijayarakṣita's part of the *Madhukośa*.⁷³

The author of the *Mādhavanidāna* is called Mādhavācārya by Āḍhamalla⁷⁴ and in the commentary on the *Āyurvedābhdhisāra*.⁷⁵ He is quoted or referred to as Mādhavakara or -kāra in Aghoranātha's commentary on his *Bhīṣaksarvasva*,⁷⁶ Āsubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Hemādri's commentary on the *Aṣṭāṅgharḍdayasaṃhitā*,⁷⁷ Nīscalakara's *Ratnaprabhā*,⁷⁸ Śivamiśra's *Vaidyāśāstraśivānubhava*, Śrīkaṇṭhadatta's part of the *Madhukośa*,⁷⁹ Sukhānanda's commentary on the *Vaidyājīvana*,⁸⁰ Vācaspati's commentary on the *Mādhavanidāna*,⁸¹ and Vijayarakṣita's part of the *Madhukośa*.⁸² Āsubodha and Nityabodha Senagupta quote him as the Rugvinīścayakṛt in their commentary on the *Rasaratnasamuccaya*. He is called Saṃgrahakāra in Śrīkaṇṭhadatta's part of the *Madhukośa*⁸³ and Vācaspati's *Ātānkadarpaṇa*.⁸⁴

The *Mādhavanidāna* is quoted or referred to as *Gadavinīścaya*, *Mādhavanidāna*, *Mādhavasamgraha*, *Nidāna*, *Nidānasamgraha*, *Rogavinīścaya* and *Rugvinīścaya* in Āḍhamalla's commentary on the *Śārngadharasamhitā*,⁸⁵ Aghoranātha's commentary on his *Bhīṣaksarvasva*,⁸⁶ the *Ārogyāmṛtabindu*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,⁸⁷ the *Basavarājīya*,⁸⁸ *Bhāvaprakāśa*,⁸⁹ *Bhesajjamañjūsāsannaya*, *Brhannighaṇṭuratanākara*, Caturbhūja's commentary on the *Rasahrdaya*,⁹⁰ Guṇrājśarmamiśra's *Viśikhānupraveśavijñāna*,⁹¹ Harṣakīrti's *Yogacintāmaṇi*,⁹² Hemādri's commentary on the *Aṣṭāṅgharḍdayasaṃhitā*,⁹³ Jñārasāra's version of the *Amṛtasāgara*,⁹⁴ Kāśīrāma's commentary on the *Śārngadharasamhitā*,⁹⁵ Lakṣmīcandra's *Lakṣmīprakāśa*,⁹⁶ Lakṣmīrāma's commentary on the *Siddhabheṣajamañimālā*,⁹⁷ Meghamuni's *Meghavinoda*,⁹⁸ Nīscalakara's *Ratnaprabhā*,⁹⁹ Rāmacandra's *Rāmaṇinoda*, Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*,¹⁰⁰ Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*, Śrīkaṇṭhadatta's commentary on the *Siddhayoga*,¹⁰¹ Trimalla's *Yogatarāṅginī*,¹⁰² and *Brhadyogatarāṅginī*,¹⁰³ Vācaspati's commentary on the *Mādhavanidāna*,¹⁰⁴ Vallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*,¹⁰⁵ the *Vīrasimhāvaloka*,¹⁰⁶ Vṇḍa's *Siddhayoga*,¹⁰⁷ and Yogīndranātha's commentary on the *Carakasamhitā*.¹⁰⁸

The nidāna verses of a very large number of later works draw heavily on the *Mādhavanidāna* without specifying this source.

Verses said to be from the *Mādhavanidāna*, but dealing with treatment, are found in the *Basavarājīya* and Vallabhendra's *Vaidyacintāmaṇi*.

Works related to the *Rogavinīścaya* or *Mādhavanidāna*

A supplement, called *Nidānapariśiṣṭa*, was written by Hārādhanā,¹⁰⁹ while a *Mādhavanidānapariśiṣṭa*¹¹⁰ is due to Brahmaśaṅkara Śāstrī.¹¹¹ An *Abhinavamādhavanidāna* by Rājaguru Kavicaṇḍra and a *Mādhavanidānasāra* are known from Sri Lanka.¹¹²

Commentaries on the *Rogavinīścaya* or *Mādhavanidāna*

The large number of commentaries on the *Rogavinīścaya* testifies to the fame this work acquired.

The following commentaries are known or mentioned:

- 1 *Vyākhyāmadhukośa* by Vijayarakṣita and Śrīkaṇṭhadatta.
- 2 *Ātaṅkadarpaṇa* by Vācaspati.
- 3 *Rogavinīścayavivaraṇasiddhāntacintāmaṇi*¹¹³ or simply *Siddhāntacintāmaṇi*¹¹⁴ by Narasiṃha Kavirāja,¹¹⁵ assistant of Rāmakṛṣṇa Bhaṭṭa and son of Nīlakaṇṭha Bhaṭṭa.¹¹⁶ Narasiṃha was the teacher of Vaidyācintāmaṇi, who lived in the eighteenth century.¹¹⁷ Narasiṃha refers in the *Siddhāntacintāmaṇi* to his commentary on the *Carakaśaṅhitā*, called *Carakatattvaparakāśakaustubhaṭīkā*, and frequently adduces Caraka in illustration of Mādhava's verses, whilst quotations from Sūśruta are much rarer.¹¹⁸
- Narasiṃha's *Siddhāntacintāmaṇi* is undoubtedly the same as the *Siddhāntacandrikā* by Narasiṃha Kavirāja, son of Nīlakaṇṭha Bhaṭṭa and pupil of Rāmakṛṣṇa Bhaṭṭa, mentioned by S. Dasgupta,¹¹⁹ who claims that the work, though based on the *Madhukośa*, is an excellent commentary, containing much that is both instructive and new. Dasgupta was in error when supposing that probably the only MS available was the one belonging to the library of his family; an edition, planned by him, never appeared. Th. Aufrecht recorded a MS of an anonymous *Siddhāntacandrikā* on the *Mādhavanidāna*.¹²⁰ P.V. Sharma discovered an additional MS of Narasiṃha's commentary in the Central Library of the Benares Hindu University. This MS, the first two parts of which are missing, was written in 1770 by one Jayacandraḍāsa, who belonged to the tradition of Narasiṃha.¹²¹ P.V. Sharma¹²² informs us that Narasiṃha criticizes the authors of the *Madhukośa* at many places and quotes the following authorities and works: Bhaṭṭāraka (Hariścandra), Bhoja, Cakra, Caraka, Gayin, Hārīta, Jejjāṭa, Kṣārapāṇi, *Mahābhārata*, Nimi, Sātyaki, Śrīdharasvāmin, Sūśruta, Vāgbhaṭa, Vāpyacandra, Varāhamihira, Videha, *Viṣṇudharmottara*, *Vṛddhakāśyapa*, and Yaśodhara. The data available point to the eighteenth or the last part of the seventeenth century as the age of Narasiṃha.
- 4 *Mādhavanidānaṭippaṇī* by Bhāvamīśra.¹²³ An anonymous work of the same title is also known.¹²⁴
- 5 *Rugvinirṇayaṭīkā* by Bhavānī Sahāya.¹²⁵
- 6 *Nidānārthaprakāśīkā* by Candrakumāra Dāsa.¹²⁶
- 7 *Saralā* by Chiraṇjivi Lall Sharma.¹²⁷
- 8 *Arthaprakāśīkā* by Gaṇeśa Bhiṣaj.¹²⁸

- 9 a commentary by Īśānadeva.¹²⁹
- 10 *Mādhavanidānasubodhinī* by Jñānameru, pupil of Mahimasundaragaṇi of the Kharataragaccha, in his turn pupil of Sādhukīrtiyupādhyāya.¹³⁰
- 11 a commentary by Kālidāsa.¹³¹
- 12 a commentary on chapter two (on fevers) by Karmacandra, a Jain monk of the Kharataragaccha, who lived in the second half of the seventeenth or first half of the eighteenth century.¹³²
- 13 a commentary by Maitreyarakṣita.¹³³
- 14 a commentary by Raiśarman,¹³⁴ who may have been the elder brother of Vācaspati, the author of the *Ātaṅkadarpaṇa* on the *Mādhavanidāna*.¹³⁵
- 15 *Vaidyamanoramā* by Rāmakṛṣṇa, son of Gaurī and Nīlakaṇṭha.¹³⁶
- 16 a commentary by Rāmanātha Vaidya.¹³⁷
- 17 *Śārādā* by Śrīśārādācaraṇasena, a relatively modern commentary.¹³⁸
- 18 a commentary by Sudhīra.¹³⁹
- 19 a commentary by Sukīra.¹⁴⁰
- 20 *Sudhālaharī* by Umeśānanda Śarman, a modern commentary.¹⁴¹
- 21 *Subodhinī* by Vādeva (Vāsudeva?) Māthura, consisting of short glosses on difficult verses of the *Nidāna*.¹⁴²
- 22 an anonymous commentary called *Bālabodhinī*.¹⁴³
- 23 an anonymous avacūri.¹⁴⁴
- 24 an anonymous stabaka.¹⁴⁵

Gaṅgārāma, a Jain monk, rendered the *Mādhavanidāna* into Hindī verse in 1821/22; this version, called *Yatinidāna*, contains additional material on diseases not described by Mādhava.¹⁴⁶

Mādhavacikitsā

The *Mādhavacikitsā*¹⁴⁷ is the earliest compendium on therapy of Sanskrit medical literature, if one disregards a work like the *Yogaśataka*, which consists only of a collection of recipes.¹⁴⁸

The text of the edition is divided into eighty-one chapters. Chapters one to sixty-seven are connected with the treatment of the disorders described in the *Mādhavanidāna*, essentially in the same order. The remaining chapters are devoted to rasāyana (68), vājīkaraṇa (69), pañcakarman (70), sneha (71), sveda (71), sveda (72), vamaṇa (73), vireka (74), anūvasana and nirūha (75–76), dhūma (77), nasya (78), kavala and gaṇḍūṣa (79), prescriptions for various disorders (prakīrṇarogacikitsā), as well as weights and measures (80), and paribhāṣā (81). The same type of arrangement was adopted in many later works, such as Vṛṇḍa's *Siddhayoga*¹⁴⁹ and Cakrapāṇidatta's *Cikitsāsamgraha*.¹⁵⁰

The scheme of chapters one to sixty-seven does not fully agree with that of the *Mādhavanidāna*. The *Mādhavacikitsā* has separate chapters on pravāhikā (irritation of the large intestine, including the bacillary dysenteries; 3),¹⁵¹ bhūtonmāda (insanity caused by supernatural beings; 19),¹⁵² gr̥dhrasī (sciatica; 22),¹⁵³ plīhan (splenomegaly; 36),¹⁵⁴ śophodara (37),¹⁵⁵ snāyuka (dracontiasis, i.e., the Guinea worm disease; 53),¹⁵⁶ and somaroga or mūtrātisāra (a polyuria occurring in women;

63).¹⁵⁷ One chapter is concerned with the therapy of visarpa and visphoṭa (52), whereas the *Mādhavanidāna* devotes two chapters to these diseases.¹⁵⁸ One chapter deals with all kinds of vṛṇa (ulcers and wounds; 43).¹⁵⁹ The chapters on kaumārabhṛtya are arranged differently from those in the *Nidāna*; their order is strīroga (61), pradara (62), somaroga (63), strīroga again (64), and garbharaksā (65).¹⁶⁰ whereas the *Nidāna* has asṛgdara (= pradara), yonivyāpad (a composite group, comprising menstrual disorders, diseases of the vagina, and functional disorders of psychogenic origin), yonikanda, mūdhagarbha (disturbances of pregnancy and malposition of the foetus), sūtikāroga (puerperal diseases), stanaroga (diseases of the breasts), and stanyaduṣṭi (disorders of the breastmilk).¹⁶¹

A striking feature of the *Mādhavacikitsā* is the presence of chapters on the treatment of snāyuka and somaroga, diseases unknown to the author of the *Mādhavanidāna*.¹⁶² The disease called snāyuka is described for the first time in Vṛnda's *Siddhayoga* (55.15–19), somaroga in Vaṅgasena's *Cikitsāsārasaṅgraha* (strīroga 80–88), two treatises written after the period in which Mādhava lived. The view that the *Mādhavanidāna* and *Mādhavacikitsā* were written by one and the same author¹⁶³ can therefore be upheld only if the chapters on snāyuka and somaroga are considered to be interpolations of later origin.¹⁶⁴ The possibility that these chapters are actually interpolations is strengthened by the absence of a chapter on snāyuka in the manuscript kept at the Bhandarkar Oriental Institute in Poona.¹⁶⁵

The general impression one gains on reading the *Mādhavacikitsā* is that of a rather early work, prior to the *Siddhayoga*. It shares many verses with it, but is more concise. Part of its prescriptions do not occur in the *Siddhayoga*¹⁶⁶ or *Cakradatta*.

Details pointing to an early date of composition – prior to that of the *Siddhayoga* – are the following. The chapter on kṛmīroga (diseases caused by parasites; 7) does not yet prescribe the use of pārasīyavānī,¹⁶⁷ and the juice from the leaves of dhātūra.¹⁶⁸ Religion and astrology do not figure in the treatment of masūrikā and viṣa, while they do so in the *Siddhayoga*.¹⁶⁹ Many of the more complicated compound formulae of *Siddhayoga* and *Cakradatta* are absent from the *Mādhavacikitsā*.¹⁷⁰

A noteworthy feature is the presence, in agreement with the *Mādhavanidāna*, of a separate chapter on the treatment of sūla and pariṇāmasūla.¹⁷¹ Chapters on the treatment of āmavāta,¹⁷² amlapitta,¹⁷³ and medoroga¹⁷⁴ are present as well. The section on the treatment of various disorders contains a prescription against śtāpitta (prakṛṇaroga 1).¹⁷⁵

Some other noteworthy features of the treatise consist of a prescription with kañcaṭa¹⁷⁶ as one of its ingredients and the presence of prescriptions against carmakīla in the chapter on kṣudraroga (55.25 and 30).^{177,178}

Sources are sometimes referred to in the *Mādhavacikitsā*.¹⁷⁹ A considerable number of verses have been borrowed from Ravigupta's *Siddhasāra*.¹⁸⁰

As in the *Mādhavanidāna*, the author does not mention his name, but the colophon of the edition states that the work is by Mādhava, son of Indukara.¹⁸¹

The *Mādhavacikitsā* is quoted as *Mādhavasamgraha* in Niścalakara's *Ratnaprabhā*¹⁸² and, without mention of the name of the work, by Śrīkaṇṭhadatta in the *Vyākhyānakusumāvalī*.¹⁸³

Other medical works

The question which of the other medical treatises attributed to an author called Mādhava can be assigned to the one who wrote the *Mādhavanidāna* and, possibly, the *Mādhavacikitsā*, still remains partially unanswered, though many of the problems concerning medical works by authors of the name of Mādhava have been solved in recent years, first and foremost thanks to the scholarship of P.V. Sharma.¹⁸⁴ Some obscurities are left, for it cannot be ascertained which Mādhava wrote the works called *Praśnasahasraavidhāna*, *Yogavyākhyā*, and *Mādhavasamgraha*.

The *Praśnavidhāna* is once, without the author being mentioned, referred to by Vijayarakṣita,¹⁸⁵ who calls it a *śuśrutaśloka-vārttika*, i.e., versified glosses on the *Suśrutasamhitā*.¹⁸⁶ A quotation, attributed to Mādhavakāra in Hemādri's commentary on the *Aṣṭāṅghaṛdaya*,¹⁸⁷ may be from the same work. Niścalakara quotes the *Praśnasahasraavidhāna*, i.e., the exposition on a thousand questions, in his *Ratnaprabhā*; unlike Vijayarakṣita, he also gives the name of its author, Mādhava or Mādhavakara.¹⁸⁸ Niścala's first quotation consists of a question and the answer to it, both in verse, connected with a statement found in the *Suśrutasamhitā*;¹⁸⁹ the second quotation, in verse too, is about the nature of vāta diseases.¹⁹⁰ The *Suśrutavārttika* of Mādhava, once quoted in Niścala's *Ratnaprabhā*,¹⁹¹ is obviously the same work as the *Praśnasahasraavidhāna*, because it was also composed in the form of questions and answers in verse.

A kind of commentary on the *Suśrutasamhitā* by a Mādhava(kara) has once existed, as is clear from a statement found in Vijayarakṣita's part of the *Madhukośa*,¹⁹² where – in a passage that refers to a stanza from the *Suśrutasamhitā* – Mādhavakara's name occurs as one among a number of authors of explanatory works.¹⁹³ The same series is found in Narahari's *Vāgbhaṭamaṇḍana*.¹⁹⁴ Moreover, Vācaspati cites in his *Ātariḱadarpaṇa*¹⁹⁵ an explanation by Mādhava that also occurs in the *Madhukośa*, where it is not explicitly attributed to Mādhava. The remark derives from a commentary on the *Suśrutasamhitā*, being clearly an elucidation of a technical term found in a passage from that treatise.¹⁹⁶ Finally, the *Ratnaprabhā* claims that an author called Govardhana¹⁹⁷ preferred a comment by Jejjāta to that on the same subject by Mādhava.¹⁹⁸

An unsolved question is whether or not this commentary on the *Suśrutasamhitā* is identical with the *Praśnasahasraavidhāna*. Conclusive evidence is not available, but it seems reasonable to assume that Mādhava did not write two explanatory treatises on the same *saṃhitā*.

The identity of this author has not yet been determined. S. Dasgupta¹⁹⁹ pointed to the Śrīmādhava who, according to Ḍaḷhaṇa in the introduction to his *Nibandhasamgraha*, composed a *ṭippaṇa* on the *Suśrutasamhitā*. This Śrīmādhava may or may not be the same as the one who wrote the *Praśnasahasraavidhāna*. P.V. Sharma²⁰⁰ suggested that the author of the *Praśnasahasraavidhāna* may be identical with Mādhava, son of Indrakara, who composed the *Paryāyaratnamālā*. Evidence confirming this identity is, however, completely lacking.

The *Yogavyākhyā* is once quoted as a work by Mādhavakara in Śrīkaṇṭhadatta's commentary on the *Siddhayoga*.²⁰¹ Judging from Śrīkaṇṭha's quotation, this work appears to have been a treatise on medicinal compounds. Niścalakara also quotes Mādhava(kara)'s *Yogavyākhyā* in his *Ratnaprabhā* on the *Cakradatta*.²⁰² The references to and the three citations in prose from this work suggest that it consisted of explanations regarding the preparation of compound drugs. Niścala is the only author mentioning a shorter version of Mādhava(kara)'s *Yogavyākhyā*, called *Svalpayogavyākhyā*.²⁰³ Conclusive evidence concerning the identity of this Mādhava(kara) is not available, but he may well be the same Mādhava(kara) who wrote the *Praśnasahasraavidhāna* on the *Suśrutasamhitā*.

The information that can be extracted from the *Ratnaprabhā* points to the *Yogavyākhyā* and *Svalpayogavyākhyā* as works concerned with the explanation of prescriptions found in the *Carakasamhitā*.²⁰⁴

A number of Niścala's quotations from and references to Mādhava(kara) that do not name a particular treatise²⁰⁵ impress as being from the *Yogavyākhyā*, on account of their style and contents. The work they comment on is the *Carakasamhitā*.²⁰⁶ Mādhava(kara) is repeatedly said to follow Jejjāta's views;²⁰⁷ Govardhana is an author who often agrees with him.

A *Mādhavasāṃgraha* is quoted, once only, by Niścalakara.²⁰⁸

The author

The *Rogaviniścaya* and *Mādhavacikitsā* are completely silent as to their author. He is called Mādhava, Śrīmādhava, or Mādhavakara in the colophons of manuscripts of the *Nidāna* and its commentaries²⁰⁹ and in those of the *Cikitsā*.²¹⁰ His name appears as Mādhava and Mādhavakara in Vijayarakṣita's part of the *Madhukośa*. Śrīkaṇṭhadatta refers to him as Mādhavakāra in his commentary on the *Siddhayoga*. Hemādri once quotes from the *Nidāna* as the work of Mādhavakara.

The name of Mādhava's father is Indukara or Candrakara in the colophons of manuscripts of the *Nidāna* and *Cikitsā*.²¹¹

The foregoing does not suffice to decide whether the author's name was Mādhava or Mādhavakara. It has been supposed, since their names end in -kara, that Mādhavakara and his father belonged to the Kara family mentioned as one of the families of Bengal physicians in Bharatamallika's *Candraprabhā*.²¹² The only evidence on this point is the ending -kara of the names of Mādhava and his father, but, as we have seen, there is no certainty in this respect with regard to Mādhava's name.²¹³ The name of Mādhava's father need not imply a Bengal origin, for authors are known with a name ending in -kara who did not belong to Bengal.²¹⁴

In the past there has been confusion as to the identity of Mādhava,²¹⁵ a confusion created by Hoernle in an article about the commentaries on the *Suśrutasamhitā*,²¹⁶ in which he assumed on faulty grounds that Mādhava and Vṛnda might be one and the same person. The fact that Vṛnda's *Siddhayoga* is also known as *Vṛndamādhava* strengthened him in his belief that the *Mādhavanidāna* and *Siddhayoga* were the

two parts of one work by Vṛnda. Hoernle was unaware of the existence of the *Mādhavacikitsā*, although R. Mitra's description of the Bikāner MS was available at the time he wrote his article. The discovery of more MSS has made it quite clear that Hoernle's views on the subject do not reflect the actual state of affairs.

Date

Mādhava's terminus post quem can only be deduced from the sources of the *Nidāna* and *Cikitsā*. Since the greater part of the *Rogaviniścaya* consists of stanzas borrowed from the *Carakasamhitā*, *Suśrutasamhitā*, *Aṣṭāṅgahrdayasamhitā*, *Aṣṭāṅgasamgraha*, and *Siddhasāra*, and since the *Mādhavacikitsā* contains many verses quoted from the *Siddhasāra*, their dates of composition cannot be earlier than about A.D. 650. The terminus ante quem is the date of Vṛnda, about A.D. 900, because the *Mādhavanidāna* is referred to in the *Siddhayoga*.²¹⁷

Moreover, it has been common knowledge for a long time that a number of Arabic authors mention an Indian medical treatise that may be the *Mādhavanidāna*.²¹⁸ Among the Indian medical works recorded by Ibn Abī Uṣaybi'a (who died in 1270) in the twelfth book of his 'classes of physicians', the 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā',²¹⁹ one finds a treatise with the title bdān or ydān,²²⁰ already corrected into ndān, i.e., Nidāna, by Dietz²²¹ and H.H. Wilson.²²² Uṣaybi'a observes that the signs of 404 diseases are described in the work without indicating their treatment.²²³ This characterization points rather to a work like the *Mādhavanidāna* than to the *Nidānasthāna* of one of the classical samhitās, because a restricted number of diseases is dealt with in the latter under that heading. The *Nidāna* is also mentioned by Arabic authors who were earlier than Ibn Abī Uṣaybi'a, namely al-Rāzī and Ibn Wādīh al-Ya'qūbī.²²⁴ The latter describes it in the same way as Uṣaybi'a. Important new evidence came to light in 1928 with the edition of 'Alī ibn Sahl al-Ṭabarī's *Firdaws al-ḥikma*, i.e., *Paradise of Wisdom*.²²⁵ In the so-called Indian books of this treatise²²⁶ several Indian medical works are mentioned: jrk, ssrd, ndān, and aṣṭāṅghrdy, i.e., *Caraka*, *Suśruta*, *Nidāna* and *Aṣṭāṅgahrdaya*. It is highly probable that ndān is the *Mādhavanidāna*, as no other famous Indian book with a similar title could have spread to the Arab world at so early a date (about A.D. 850). This reference to the *Nidāna* is the earliest one known in Arab literature. Because of its importance it may be expedient to summarize the most salient facts about this work and its author.²²⁷

Abū'l Ḥasan 'Alī ibn Sahl al-Ṭabarī completed his *Firdaws al-ḥikma fī'l ṭibb* in Sāmarrā in the third year of the reign of the caliph al-Mutawakkil, i.e., in 849/850. It is a work of large scope, giving a survey of the Greek, Syrian and Indian systems of medicine as known to the Muslims. Its arrangement is less methodical than that of later medical works in Arabic, but it is often quoted by al-Rāzī and others. Particularly important is the thirtieth and last section of the *Paradise of Wisdom*, which deals with Indian medicine. In thirty-six chapters, the majority of which are rather short, it succinctly describes the theory and general therapeutic principles of Indian medicine, while at the end a number of recipes are found. The translation of Sanskrit medical terms into Arabic is usually correct,²²⁸ which indicates that 'Alī ibn Sahl made use

of the translations of Sanskrit medical works executed by order of the first 'Abbāsīd caliphs, in particular Hārūn al-Raṣhīd (768–809), and encouraged by the Barmakids.²²⁹

The *Nidāna* as a separate book is mentioned once in the Indian books of the Paradise of Wisdom. The term *Nidāna* appears on two other occasions, where it is not the *Mādhavanidāna* that is referred to, but the *Nidāna* section of some other treatise. Neither a direct translation of parts of the *Mādhavanidāna* is traceable nor of passages from the *Caraka*-, *Suśruta*- and *Aṣṭāṅgahṛdayasaṃhitā*, for 'Alī ibn Sahl only gives summaries of Indian medical doctrines.

Accepting the evidence supplied by 'Alī ibn Sahl and later Arabic authors and taking into account the time needed for the work of an Indian writer to become so famous as to be translated into Arabic in Persia, and to be employed as one of his chief sources by an Arabic author in 849/850, it appears reasonable to suppose that Mādhava lived in the eighth century.

The *Vyākhyāmadhukośa*

The *Vyākhyāmadhukośa*,²³⁰ often simply called *Madhukośa*,²³¹ is an elaborate and valuable commentary which covers the whole of the *Mādhavanidāna*.²³² It is the earliest commentary on Mādhava's treatise and gives the impression that it is not only based on works of predecessors. The first half, up to chapter thirty-two, was written by Vijayarakṣita, the second half is due to his pupil Śrīkaṇṭhadatta. Both authors quote many authorities. Vijayarakṣita presents a list of those regarded as important in the introductory verses of the *Madhukośa*: Bhāṭṭāra (haricandra), Jejjāta, Gadādhara, Vāpyacandra, Śrīcakrapāṇi (datta), Bakula, Īśvarasena, Bhoja, Īśāna, Kārttika (kuṇḍa), Sukīra, Sudhīra, Maitreya, and Mādhava.

Quoted or referred to in Vijayarakṣita's part of the *Madhukośa* are: *Abhidhāna* (2.10–11),²³³ Agniveśa (2.66cd–74ab), Amara (1.1), Aṣādhadharmā (1.14cd–15ab), Bakulakara (6.15; 22.1–4), Bhāluki (2.24, 31cd–32ab, 75), *Bhālukitantra* (2.18–23, twice), Bhāṭṭāraharicandra (1.4; 1.5a–c, four times; 1.10, twice; 2.1 and 61cd–65; 28.3),²³⁴ Bheḍa (2.37–38), Bhoja (3.21; 5.1; 17.14–15ab; 18.4–6), Cakra (2.18–23, twice; 2.30cd–31ab, 61cd–65, 66cd–74ab; 5.31–32; 8.1 and 10; 12.27–34; 20.5; 22.57cd–58ab), Candrikākāra (2.61cd–65; 10.20; 22.1–4, 15, 27–28ab), Caraka (often), Dṛḍhabala (2.18–23, three times; 8.2; 12.1–2; 16.8cd, twice; 17.15cd–16ab; 22.14–15ab, 28cd–32ab, 44–47ef; 24.1–5; 29.6; 30.1–2; 32.1–3a), Gadādhara (1.4 and 11–13; 2.8–9, 40, 42–47; 3.4; 3.9–10, twice; 5.31–32; 6.5–6; 10.19c–f; 11.1–2; 16.1–2; 22.38cd–39ab and 39cd–41), Gautama (5.33–34), Gayadāsa (2.18–23; 9.11 and 12–14; 11.12–13; 12.8 and 11–14; 18.7; 22.57cd–58ab, 58cd–59ab, 59cd–60ab, 68cd–70ab, 70cd–72; 28.2, 3, 14; 29.2 and 6), Guṇākara (5.31–32), Haricandra (1.5a–c and 15cd–18; 2.34–36ab and 39; 2.61cd–65, twice; 18.9; 28.3),²³⁵ Hārīta (1.5d–6; 2.15cd–16, 37–38, 61cd–65; 2.66cd–74ab, twice; 3.21; 8.2; 16.5; 22.57cd–58ab, twice; 26.1; 29.6), *Harivamśa* (2.1), Īśāna (deva) (2.34–36ab; 22.22–26, 28–32ab, 54–56; 23.1–3; 24.6–10), Īśvarasena (1.7), Jatūkarṇa (2.55, twice; 2.61cd–65; 12.11–14), Jejjāta (1.4, 5d–6, 11–13; 2.2, 3, 10–11, 18–23, 24, 26–30ab; 2.30cd–31ab, twice; 2.37–38, twice; 2.39, twice; 2.40; 2.42–47, twice; 2.59.61ab; 2.61cd–65, twice;

2.66cd–74ab, three times; 3.4, 9–10, 14–19, 20; 5.3–4; 6.5–6 and 23; 8.1; 8.8–10 (twice); 8.11, 12–15, 19cd–21ab; 9.6–7ab and 12–14; 10.2; 10.21–29ab, twice; 11.12–13; 12.8, 11–14, 18–20, 27–34; 12.35–36, three times; 16.10; 17.6, 14–15ab, 16cd–18; 18.9 and 22; 19.7–8; 20.4, 5, 6; 20.26, twice; 20.29–30, twice; 22.6–9, twice; 22.37cd–38ab, 58cd–59ab, 70cd–72; 24.1–5; 28.2, 3, 15–16; 29.2 and 6), Karavīracārya (3.14–19), Kārttika(kuṇḍa) (1.5d–6; 2.3, 4–7, 8–9, 10–11, 15cd–16; 2.48–54, three times; 2.61cd–65, twice; 2.66cd–74ab; 3.1–3 and 9–10; 5.43; 6.15; 9.11; 10.2 and 14; 22.15, 64cd, 68cd–70ab, 70cd–72; 27.2–12), kāśmīrāḥ (5.27cd–30; 10.5; 14.2), *Kāśmīrapāṭha* (2.18–23), Kharanāda (2.34–36ab and 61cd–65), Kṣārapāṇi (3.11; 28.3), Mādhava(kara) (1.5d–6, twice; 2.66cd–74ab; 10.8–12; 11.12–13; 22.44–47ef; 22.65ab, twice), *Nāgabhartṛtantra* (2.37–38), Nāgārjuna's *Ārogyamañjarī* (6.5–6), Pālakāpya (2.1), Parāśara (1.5d–6; 2.39; 3.21; 8.8–10), *Praśnavidhāna* (1.14cd–15ab), *śālākya* (22.65ab), *Samgraha* (30.1–2), Sudāntasena (1.5a–c and 8–9), Suśruta (often), Svāmīdāsa (1.14cd–15ab), Tīsaṭcārya (1.5a–c), Vāgbhaṭa (often), Vāpyacandra (1.4 and 5d–6; 1.8–9, twice; 1.11–13, twice; 1.15cd–18; 2.39; 28.2 and 3), Varāha (22.80), Videha (2.1, 26–30ab, 42–47; 8.11; 18.10–11; 20.18, twice; 20.24 and 26; 22.22–26), *Vṛddhabhoja* (14.4), *Vṛddhasuśruta* (2.4–7, 26–30ab, 37–38, 39, 42–47; 26.1), and *Vṛddhavāgbhaṭa* (1.8–9; 2.66cd–74ab).

Authorities and works quoted or referred to by Śrīkaṇṭhadatta in his part of the *Madhukośa* are: Agnivēśa (44.1), Ālambāyana (69.21cd–25ab and 28), Bhāluki (44.9–10; 49.37–39), Bhoja (33.27–28, four times; 33.34cd–35, twice; 37.7cd–11ab, twice; 38.8cd–9ab, 15, 16–17, 25, 26; 40.10cd–11ab and 17cd–20; 46.1 and 6; 49.17cd–23ab, 25cd–30, 37–39; 52.22cd–24 and 25; 53.3–8ab; 55.1; 55, 11, twice; 55.12, 22–24, 26, 28–29, 32; 55.36, twice; 55.38, 40cd, 41–43, 44–45ab; 55.45cd–47, twice; 55.50–51; 56.1, 9cd–10ab, 15, 27, 35cd–36ab; 56.38, four times; 56.47, 48, 54; 64.2 and 6), Cakra (55.12), Caṅkuṣya (59.88 and 92; 60.6), Candrikākāra (59.95 and 97–98), Caraka (often), Gadādhara (33.13–15ab, 22, 23–25, 34cd–35; 35.15d–17, 21–22c, 22d–24; 41.12; 46.8; 48.1 and 16; 49.17cd–23ab; 56.10–11, 15, 47; 58.1; 59.17, 25, 33cd–35ab, 41ab, 41cd–46, 50cd–51ab, 59, 62cd–64, 65ab, 69cd, 71, 88; 60.1 and 6; 64.7; 69.30–31), Gayadāsa (55.36), Hārīta (40.17ab; 61.6–7), Hiranyākṣa (61.6–7; 68.23), Īśāna (33.4), Jatukarṇa (55.12), Jejjāta (35.22d–24; 40.11cd–16; 46.2–3ab; 49.17cd–23ab, 25cd–30, 37–39), *Kalyāṇavinīścaya* (59.67cd and 97–98), *kāmasāstra* (47.1), Karāla (59.17), Kārttika (33.34cd–35; 36.17–20; 38.18–20ab; 45.2cd; 55.28–29; 56.22, 23, 53; 57.5; 58.1; 59.14, 22, 24, 33cd–35ab, 49; 59.50cd–51ab, twice; 59.59, 62cd–64, 65cd, 73ab, 74b–d, 75, 86, 89; 69.21cd–25ab, twice; 69.30–31), Kharanāda (56.38), Kṣārapāṇi (36.17–20), Mādhava(kara) (45.6cd; 59.96; 60.9–10),²³⁶ Nimi (57.8; 59.29, 41ab, 65ab, 80; 60.8), Ravigupta (59.67cd), *śālākya* (60.1), *Samgrahakāra* (38.9cd–10; 56.27),²³⁷ Sātyaki (59.47–48ab, twice; 59.94 and 95; 66.11–13),²³⁸ Suśruta (often), Vāgbhaṭa (often), Vāpyacandra (33.7cd–12), Vātsyāyana (48.1), Videha (55.28–29, twice; 55.30; 56.55; 57.1, 2–3, 4, 6–7; 58.2; 59.15, 18; 59.22, twice; 59.26, three times; 59.28, 29, 33cd–35ab, 47–48ab; 59.60cd–61ab, twice; 59.69cd, 70ab, 70cd, 73cd, 74b–d, 75, 76, 79, 81, 85, 87, 88, 93, 97–98; 60.6 and 8; 60.11–13, twice; 60.14–15; 61.6–7), Viśvāmītra (49.37–39), and *Vṛddhakāśyapa* (69.33–34).

Vijayarakṣita is quoted by Niścalakara,²³⁹ Priyavrat Śarmā,²⁴⁰ and Śivadāsase-

na.²⁴¹ He is referred to by Śailendrasirṃha.²⁴² The author of the *Madhukośa* (madhukośakṛt) is cited in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya* and in the commentary on the *Āyurvedābhdhisāra*.²⁴³

Works and authors quoting the *Madhukośa* are: the commentary on the *Āyurvedābhdhisāra*,²⁴⁴ a gloss on Bhāvamiśra's *Bhāvaprakāśa*,²⁴⁵ the *Bṛhannighaṇṭurātñakara*,²⁴⁶ Gulrājśarmamiśra's *Viśikhānupraveśavijñāna*, Kāśirāma,²⁴⁷ Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, and Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍiparīkṣā*. The *Madhukośa* is referred to in Vācaspati's *Ātaṅkadarpaṇa*.

It is a matter of uncertainty why Vijayarakṣita left his commentary unfinished, though serious consideration should be given to the possibility that death intervened. It is rather generally assumed that Vijayarakṣita was a native of Bengal, which appears to be reasonable, since Nīścalakara, who belonged to that region, mentions him as an āyurvedaguru in the introductory verses of his *Ratnaprabhā*. As Vijayarakṣita is called ārogyaśālīyavaidyapati in the colophons of some old MSS of the *Madhukośa*,²⁴⁸ he is thought to have been in charge of a hospital (ārogyaśālā).²⁴⁹ The maṅgalācaraṇa of the *Madhukośa*, addressed to Harihara, shows that the author professed Hinduism, which is confirmed by his rejection of a Buddhist theory of knowledge.²⁵⁰

Concerning Vijayarakṣita's date one should recall that he refers to Cakrapāṇidatta as one of his sources, which permits us to fix the terminus post quem at about A.D. 1060. A disputed piece of evidence is an old MS of the *Nidāna*, completed in Nepal under the reign of king Jayaratnamalla on December 27, A.D. 1210;²⁵¹ the name of the work is *Śāstramadhukośa* in the colophon, though it only contains the text of the *Nidāna* with a line-by-line Newari translation; D.Ch. Bhattacharyya claimed that this MS testifies to the reputation of the *Madhukośa* in Nepal shortly after 1200.²⁵² An important clue to the date of Vijayarakṣita is provided by Nīścalakara, who states that he started writing his commentary on the *Cakradatta* after Vijayarakṣita's death. This makes the latter's terminus ante quem depend on that of Nīścalakara, who wrote his commentary in the first half of the twelfth century according to D.Ch. Bhattacharyya, which would make it possible to establish Vijayarakṣita's date at about A.D. 1100. P.V. Sharma, who disagrees with D.Ch. Bhattacharyya's chronological scheme, which makes Rāmapāla the patron of Vijayarakṣita,²⁵³ fixed his date at about A.D. 1200;²⁵⁴ later, the same author preferred placing him during the reign of Viśvarūpasena or Keśavasena,²⁵⁵ the last notable kings of the Sena dynasty.²⁵⁶ G. Hāldār²⁵⁷ regards Vijayarakṣita as the son of a daughter of Keśavasena, which would make him live in the second half of the thirteenth century. J. Jolly²⁵⁸ even supposed the *Madhukośa* to have been written in the fourteenth or fifteenth century.

Vijayarakṣita's date ultimately depends on the period of time that elapsed between his death and the composition of Nīścalakara's *Ratnaprabhā*. Nīścalakara declares that he decided to write his work because the interpretation of the *Cakradatta* had become obscured after the demise of the āyurvedaguru Vijayarakṣita. P.V. Sharma asserts that this remark proves that in Vijayarakṣita's times the *Cakradatta* was studied, next to Vynda's *Siddhayoga*, but had not yet become authoritative, as attested by the fact that Śrī-kanṭhadatta, who is later than Vijayarakṣita, chose to comment on the *Siddhayoga*.²⁵⁹

Vijayarakṣita, however, quotes Cakrapāṇidatta, whose treatises were available to him.

Vijayarakṣita's intimate acquaintance with the *Cakradatta* is attested by some quotations in the *Ratnaprabhā*, if Rakṣitapādāḥ is identical with Vijayarakṣita. Nīścala's remarks on Rakṣitapādāḥ's opinion ad grahaṇī 4²⁶⁰ and 13²⁶¹ may refer to Vijayarakṣita. The same applies to the quotations ad arśas 100–103,²⁶² agnimāndya 5,²⁶³ krimi 5,²⁶⁴ and nāḍīvr̥ṇa 5.²⁶⁵ A crucial passage is found in the *Ratnaprabhā* ad pāṇḍuroga 35–40, where Nīścala reproduces a variant of verse 40, read by Rakṣitapādāḥ. Pāṇḍuroga 40 consists of an addition of Cakra, called a ṭippanī, to 35–39 (the formula of tryūṣaṇā-dimaṇḍūra), quoted from the *Carakaśaṃhitā* (Ci. 16.73–77). Cakra's ṭippanī is absent from the *Siddhayoga*,²⁶⁶ which proves that Rakṣitapādāḥ disposed of the text of the *Cakradatta*. The identity of Nīścala's Rakṣitapādāḥ with Vijayarakṣita is supported by the remarkable similarity between his views and those of his pupil Śrīkaṇṭhadatta as expressed in the latter's *Kusumāvalī*.

Some of Nīścala's quotations are not from Rakṣita's interpretation of the *Cakradatta*, but from a medical treatise that had chapters on pharmaceutical preparations, weights and measures, etc.²⁶⁷

D.Ch. Bhattacharyya set up the hypothesis that Nīścalakara was one of Vijayarakṣita's pupils.²⁶⁸ His main argument is the mention of Vijayarakṣita as an āyurvedaguru in the introductory verses of the *Ratnaprabhā*. P.V. Sharma rejects this view, advancing that the introductory verses mean to say that Nīścala wrote his commentary after a considerable interval of time had passed since Vijayarakṣita's death, during which period the interpretation of the *Cakradatta* had suffered from bad explanations.²⁶⁹ Nīścala's own words, however, do not hint at Vijayarakṣita's death as an event that occurred a long time ago, but only express that his commentary will make the precious *Cakradatta* recover the splendour (tviṣ) that got lost owing to bad interpretations (kubodha) since the guru Vijayarakṣita passed away. He adds that he plans to achieve this aim by consulting other treatises and by having recourse to the words of his guru (gurūkti). He does not inform his readers who his guru was, although the latter is repeatedly quoted and referred to.²⁷⁰

Nīścalakara belonged to the tradition established by Vijayarakṣita according to P.V. Sharma, who is of the opinion that this tradition is referred to as guruparamparā and gurusaṃpradāya in the *Ratnaprabhā*.

Earlier, A.F.R. Hoernle²⁷¹ had dated Vijayarakṣita to about A.D. 1240, on insufficient grounds, which were refuted by D.Ch. Bhattacharyya.²⁷² Hoernle's opinion on Vijayarakṣita's date was based, amongst other things, on the rejection of a certain doctrine concerning the structure of the eye in the *Madhukośa*.²⁷³ He was wrong in attributing this rejection to Vijayarakṣita, because it is found in the latter part of the *Madhukośa*, due to Śrīkaṇṭhadatta. Furthermore, he supposed that the doctrine in question, not ascribed to a named authority, derived from Aruṇadatta, whereas the latter, who may have lived in the same age as Vijayarakṣita and Śrīkaṇṭhadatta,²⁷⁴ is not quoted in the *Madhukośa*. Since Hoernle determined Aruṇadatta's date as about A.D. 1220, he fixed Vijayarakṣita's date at about A.D. 1240.²⁷⁵ Another point put to use by Hoernle in order to establish Vijayarakṣita's date was a quotation from Guṇākara in the *Madhukośa*.²⁷⁶ wrongly regarded by him as the author of the *Yogaratanmālā*, written in 1239. Actu-

ally, the medical author Guṇākara, quoted by Vijayarakṣita, is entirely different from the Jaina scholar of the same name who wrote a commentary on the *Yogaratanmālā* in 1239/40. These remarks may suffice to demonstrate that Hoernle's manner of determining Vijayarakṣita's chronological position can now be disregarded.

A precise determination of Vijayarakṣita's date remains fraught with problems, but no doubt exists regarding his relative chronological position between Cakrapāṇidatta and Śrīkaṇṭhadatta, which means that he lived in the twelfth century.

Śrīkaṇṭhadatta wrote, besides the latter half of the *Madhukośa*, a commentary on Vṛnda's *Siddhayoga*. He was a pupil of Vijayarakṣita, as stated in the introductory verses to his part of the *Madhukośa*, and probably completed the task of his teacher after the latter's death, which implies that he lived in the twelfth century.²⁷⁷ P.V. Sharma suggests that Śrīkaṇṭha was the grandfather of Nīścalakara.²⁷⁸

A medical authority Śrīkaṇṭha, who was the author of the *Amṛtavallī*, is quoted by Nīścalakara.²⁷⁹ Some regard him as identical with the commentator,²⁸⁰ which is not defensible, because Nīścala informs us that this Śrīkaṇṭha preferred a particular reading of a verse of the *Siddhayoga* on the strength of a *tippanī* of Vṛnda, which is in this case a remark found in Śrīkaṇṭhadatta's *Kusumāvalī*;²⁸¹ this proves that the author of the *Amṛtavallī* is posterior to Śrīkaṇṭhadatta. The *Amṛtavallī* was a therapeutic treatise in verse, as shown by Nīścala's quotations.²⁸²

Vācaspati

Vācaspati's commentary on the *Mādhavanidāna*, called *Ātaikadarpaṇa*,²⁸³ is not a very original work, as it frequently follows earlier writers²⁸⁴ and leans heavily on the *Madhukośa*.²⁸⁵

Authorities and works quoted or referred to by Vācaspati are: *Abhidhāna* (55.38),²⁸⁶ *abhidhānāntara* (2.10–11;²⁸⁷ 17.1–5),²⁸⁸ *Ālamvāyana* (69.21cd–25ab and 28), *Aruṇadatta* (2.56–57), *Bakula* (6.15), *Bhāluki* (2.18–23; 2.24, twice; 2.74; 44.9–10), *Bhaṭṭarakahariścandra* (28.3),²⁸⁹ *Bhedā* (2.37–38; 60.14–15), *Bhoja* (3.21; 5.1; 17.14–15ab; 18.4–6; 37.7cd–11ab; 38.1, 8cd–9ab, 15, 16–17, 25, 26; 40.10cd–11ab; 46.6; 49.17cd–23ab and 25cd–30; 56.1, 9cd–10ab, 15, 28–29, 35cd–36ab, 36cd–37, 38, 47, 48, 54; 49.37–39; 52.22cd–24 and 25; 53.3–8ab; 55.3, 12, 22–24, 26; 55.36, twice; 55.38, 40cd, 41–43, 44–45ab, 45cd–47, 50–51; 64.2 and 6), *Bhṛgu* (introduction), *Brahmavidyārahasya* (introduction),²⁹⁰ *Cakra* (5.31–32; 8.8–10; 20.5), *Cakṣuṣya* (59.88), *Candranandana* (2.56–57), *Caraka* (passim), *Dalharja* (21.8–9; 43.3; 56.27; 57.16; 69.4–8ab), *Dr̥dhābala* (2.18–23; 8.2; 12.1–2; 16.8cd, twice; 17.15cd–16ab; 22.12–13 and 44–47ab; 24.1–5; 29.6; 32.1–3a), *Gadādhara* (2.18.23 and 42–47; 3.9–10; 5.31–32; 10.19; 22.38cd–39ab and 39cd–41; 28.2; 33.23–26; 35.15d–17; 48.1 and 16; 56.10cd–11 and 15; 59.17),²⁹¹ *Gajavaidyaka* (2.1),²⁹² *Gautama* (5.33–34), *Gayadāsa* (2.18–23 and 40; 9.11; 12.8 and 11–14; 16.1–2; 22.59cd–60ab, 68cd–70ab, 70cd–72; 28.3; 29.2),²⁹³ *Guṇākara* (2.31–32), *Hariścandra* (28.3),²⁹⁴ *Hārīta* (2.15cd–16, 26–30ab, 37–38; 3.21; 16.5; 26.1; 40.17ab; 61.6cd–7), *Harivaṃśa* (2.1), *Hiranyākṣa* (61.6cd–7; 68.23), *Īśāna* (22.22–26 and 54–55ab; 23.1–3), *Jagadvaidyaka*,²⁹⁵ *Jejjāta*

(2.34–36ab, 37–38, 42–47; 8.8–10; 9.6–7ab; 10.21–29ab; 12.8, 11–14, 18–20, 27–34, 35–36; 16.10; 17.6; 18.22cd; 19.7; 20.4, 5, 29; 22.6–8 and 70cd–72; 24.1–5; 28.2, 3, 15–16; 29.2), *jyotiṣśāstra* (18.10–11), *Kāmasūtra* (47.1), *Kāṇāda* (introduction), *Kapila* (introduction), *Karāla* (59.17), *Karavīracārya* (3.14–19), *Kārttika* (22.64cd, 68cd–70ab, 72; 55.28–29; 56.22; 58.1; 59.14 and 59; 69.30–31), *kāśmīrāḥ* (10.5), *Kāśmīrapāṭha* (2.18–23), *Kharanāda* (2.34–36ab), *Kṣīrapāṇi* (28.3; 36.17–20), *Mādhava(kara)* (5.31–32; 6.23; 17.20; 23.14–18; 59.96; 69.39–41ab), *Mādhavasamgraha* (introduction), *Madhukośa* (introduction; 2.61cd–65), *Nimi* (57.8; 59.29, 41ab, 70ab, 80, 85, 87), *Parāśara* (3.21), *Samgrahakāra* (56.20 and 28–29), *Sātyaki* (59.47), *Suśruta* (passim), *Tārikavara* (introduction), *Vāgbhaṭa* (often), *Vāpyacandra* (2.39; 28.2 and 3; 33.7cd–12), *Varāhamihira* (22.80), *Vārttika* (2.32cd–33),²⁹⁶ *Vātsyāyana* (48.1), *Videha* (2.1, 26–30ab, 42–47; 8.11; 14.2; 18.10–11; 20.18, 24, 25; 55.28–29 and 30; 56.55; 57.1, 2–3, 4, 6–7; 58.2, 7, 9cd, 10, 15, 20cd–21ab; 59.15, 18, 22, 26, 28, 29, 33cd–35ab, 60cd–61ab, 66, 69cd, 70cd, 73cd, 74, 75, 76, 88, 92,²⁹⁷ 93; 60.6 and 11–13; 61.6cd–7), *Vṛddhabhoja* (14.4), *Vṛddhakāśyapa* (69.33–34), and *Vṛddhasuśruta* (2.34–36ab and 42–47; 26.1).²⁹⁸

A Vācaspati is quoted in Ṭoḍara's *Āyurvedasaukhya*²⁹⁹ and in the *Vīrasimhāvaloka*.³⁰⁰

In the introduction to his commentary the author informs us that his father, Pramoda, was chief physician at the court of Hammīra, and that his elder brother, Raiśarman, was one of the paṇḍits at the court of Muhammad.³⁰¹

Vācaspati's father's patron, Hammīra, was identified by Hoernle³⁰² as Amīr Mu'izzuddin Muḥammad, i.e., Muḥammad Ghorī, who reigned in Delhi from A.D. 1193 to 1206.³⁰³ As pointed out by P.V. Sharma³⁰⁴ and J. Filliozat,³⁰⁵ this identification cannot be maintained. P.V. Sharma holds that Hammīra was the famous king of Raṇthambhor (Raṇastambhapura) (A.D. 1283–1301),³⁰⁶ the last of the Cāhamānas, to whom the *Hammīramahākavya* by the Jain author Nayacandrasūri³⁰⁷ is devoted, and who was attacked, defeated and killed by 'Alā-ud-Dīn Khaljī. Raiśarman is supposed to have resorted to the court of Muḥammad b. Tughluq (1325–1351),³⁰⁸ i.e., the Muhammad mentioned by Vācaspati, after Hammīra's defeat and death. P.V. Sharma dates Vācaspati therefore to about A.D. 1340.³⁰⁹ J. Filliozat, rightly observing that several persons called Hammīra are known in Indian history, is inclined to see Pramoda's patron Hammīra as the Mahārāṇā of Mewār, who recovered Chitor, several years after 'Alā-ud-Dīn had reduced it to submission in 1303.³¹⁰ J. Filliozat identified Raiśarman's patron as Muḥammad Shāh I Bahmanī, who reigned from A.D. 1358 to 1377.³¹¹ He concluded that Vācaspati must have written his commentary around the middle of the fourteenth century. The quotations in this commentary are not of much avail in establishing his date, since the latest author quoted by him is Ḍalhaṇa.

Chapter 6

Vṛnda

Vṛnda is the author of the *Siddhayoga*.¹

Contents

The *Siddhayoga* is a work on therapeutics in 3,728 verses and some prose,² arranged in eighty-two chapters.

The first verse is in praise of Śiva and Caṇḍī, Dhanvantari, Suśruta and other sages, and Ātreya. The author declares in the second verse that the order of the diseases in his work will agree with the scheme of (Mādhava's) *Gadaviniścaya* (i.e., the *Mādhavanidāna*), and that he is going to set forth therapeutic procedures from various sources,³ accompanied by remarks suited to the occasion.⁴ After twenty-one verses on general principles of pathology and therapy, Vṛnda proceeds with the treatment of fevers, the main subject of chapter one, which is followed by sixty-seven more chapters, arranged for the greater part, in fact, along the lines of the *Mādhavanidāna*. The treatise ends with chapters on rasāyana (69) and vājīkaraṇa (70), a series of nine chapters on sneha, sveda, vamana, virecana, bastividhi, nirūha, dhūmavidhi, nasya, and kavala, and three chapters on ariṣṭa, svastha, and various topics (miśraka).⁵ Usually, the chapters are almost exclusively on therapy, but some stray verses on symptomatology, etc., appear occasionally.⁶ Diseases not dealt with in earlier works are, however, fully described as to their pathogenesis, symptoms, etc.

Although Vṛnda adopted Mādhava's scheme, the arrangement of the chapters of the *Siddhayoga* differs slightly from that of the *Rogaviniścaya* in having a separate chapter on jvarātisāra (2), separate chapters on śūla (26) and pariṇāmaśūla (27), udāvarta (28) and ānāha (29), udara (37) and śothodara (38),⁷ bālaroga (66) and bālagraha (67). On the other hand, there are only two chapters on vṛṇa, namely vṛṇaśoṭha (44) and āgantuvṛṇa (45),⁸ and three on women's diseases, namely pradara (63), yoniroga (64),⁹ and strīroga (65).¹⁰ The disease called yonikanda, introduced by Mādhava in a separate short chapter, is mentioned once under the name of bhagaphala.^{11 12} Vṛnda failed to deal with the treatment of a number of kṣudrarogas, namely yavaprakhyā, kakṣā, niruddhaprakaśa, agnirohiṇī, and saṃniruddhaguda.¹³

The contents of Vṛnda's work appear to be taken largely from earlier works, in conformity with his own statement on this matter, but he does not specify his sources, except for a few isolated occurrences, where Caraka,¹⁴ Jejjāta,¹⁵ Vāgbhaṭa,¹⁶ and the vṛddhavaidyāḥ¹⁷ are mentioned.

Vṛnda's sources have not yet been studied in detail,¹⁸ but it is clear from a com-

parison with the *Cakradatta* and Nīścala's commentary on that work that he borrowed extensively from Caraka,¹⁹ Suśruta,²⁰ Vāgbhaṭa,²¹ and Ravigupta's *Siddhasāra*.²²

Some other sources are: Acyuta's *Āyurvedasāra*,²³ Amitaprabha,²⁴ *Amṛtamālā*,²⁵ an *Aśvavaidyaka*,²⁶ Bhadravarman,²⁷ Bhāluki,²⁸ Bhela,²⁹ Bindusāra,³⁰ Cakṣuṣyeṇa,³¹ *Carakottaratantṛa*,³² *Cikitsāśāstra*,³³ Hārīta,³⁴ Kṛṣṇātreya,³⁵ *Madhyavāgbhaṭa*,³⁶ *Nāvanītaka*,³⁷ Puṣkalāvata,³⁸ Ugrasena,³⁹ Videha,⁴⁰ and *Yogaśāstra* (ka).⁴¹

One verse may derive from the *Mahābhārata*.⁴² One stanza may be based on an explanation in prose by Udbhaṭa.⁴³

The *Mādhavacikitsā*, however, was probably unknown to Vṛnda.⁴⁴

Vṛnda's activity was not restricted to the collection and selection of appropriate verses from predecessors. As he mentions himself at the beginning of his treatise, he intended to add suitable remarks to the prescriptions taken from various sources. A series of remarks in the commentary on the *Siddhayoga* amply proves that this intention was carried into effect. A number of verses or parts of verses are explicitly attributed to Vṛnda,⁴⁵ and, as one of these is called a *tippanikā* of Vṛnda,⁴⁶ it may be justified to assume that other verses, similarly called *tippana* or *tippanī*,⁴⁷ also derive from the author.⁴⁸ Nīścalakara twice quotes a *Vṛndaṭippanī* in his *Ratnaprabhā*.⁴⁹

Some verses composed by Vṛnda can be identified by help of the commentaries of Nīścalakara and Śivādāsasena on the *Cakradatta*.⁵⁰ Some more contributions of Vṛnda are easily recognized as such.⁵¹

Remarks of Vṛnda, expressing his own opinion on particular subjects, conflicted occasionally with the views or explanations of other authorities, and were not always to the liking of the commentator on the *Siddhayoga*.⁵² Nīścala and Śivādāsasena indicate, in their commentaries on the *Cakradatta*, that Cakrapāṇi incidentally modified Vṛnda's verses.⁵³ Both commentators repeatedly criticize Vṛnda's views.⁵⁴

Śivādāsasena repeatedly employs the term *vṛndaṭippanī* or *-tippanikā* when he refers to the *Vyākhyākusumāvalī*.⁵⁵ This illustrates that the terms *tippana*, etc., were used both to denote short remarks by a compiler like Vṛnda, and comments by a later author on the work of a predecessor, like, for example, the *Lakṣmaṇaṭippanaka* on the *Suśrutasaṃhitā*, quoted by Ḍaḥṇa.⁵⁶

Authors and works quoting from or referring to Vṛnda are: Āḍhamalla,⁵⁷ Ananta in the *Pratāpakalpadruma*, Āśubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Bhāvamīśra,⁵⁸ Devasiṃha Viṭṭhal in his *Bṛhadāsavarīṣaṅgraha*,⁵⁹ Gopālādāsa in the *Cikitsāśāstra*, Gopālādāsa Vādīndra in the *Cikitsāśāra*,⁶⁰ Harṣakīrti in the *Yogacintāmaṇi*, Hemādri,⁶¹ Jagannātha in the *Yogaśaṅgraha*, Jayaratna in the *Jvaraparājaya*, Jñārasarāmaśarman's version of the *Anṛtasāgara*,⁶² Karandīkar's *Nidānāḍipikā*,⁶³ Kāśīrāma,⁶⁴ Lakṣmīrāma,⁶⁵ Meghamuni in the *Meghavinoda*, Nīścalakara,⁶⁶ the *Pākamārtanḍa*,⁶⁷ Rāmacandra's *Rāmavinoda*, the *Ratnasāgara*, Śivādāsasena in his commentary on the *Cakradatta*,⁶⁸ Śivamīśra in the *Vaidyaśāstraśivānubhava*, Tōḍara,⁶⁹ Trimalla,⁷⁰ Kṣemāditya Paṇḍita Vāsudeva in the *Vāsudevānubhava*, Viṣṇudeva in the *Rasarājyalakṣmī*, the *Yogaratnākara*,⁷¹ and Yogīndranāthasena in his commentary on the *Carakasāṃhitā*.⁷²

A *Vṛddhavṛnda* is quoted in VācakaDīpacandra's *Laṅghanapathyanirṇaya*. The au-

thor of the *Siddhayoga* is referred to as *Vṛṇḍakuṇṭha* by *Śrīkaṇṭhadatta* in the introduction to his commentary on the work. *Nīścalakara* and *Śivādāsasena*⁷³ call him sometimes *Vṛṇḍakuṇḍa*.

Authors and works quoting from or referring to the *Siddhayoga* are: *Anantakumāra*,⁷⁴ *Āsubodha* and *Nityabodha* Senagupta in their commentary on the *Rasaratnasamuccaya*, the *Bhesajjamañjūsāsannaya*, *Hemādri*,⁷⁵ *Nīścalakara*,⁷⁶ *Śivādāsasena*,⁷⁷ and *Yogīndranāthasena* in his commentary on the *Carakasamhitā*.⁷⁸ The *Vṛṇḍamādhava* (i.e., the *Siddhayoga*) is quoted in *Rājeśvaradatta* Miśra's *Svasthavṛttasamuccaya*; it was one of the sources of the *Bheṣajasaṃhitā*, *Rasayogasāgara*, and *Rasoddhātatantra*.

Vṛṇḍa's work is called *Vṛṇḍasaṃgraha* in *Nīścalakara*'s *Ratnaprabhā*,⁷⁹ *Raṅgajyotirvid*'s *Viśārasudhākara*, *Śivādāsasena*'s commentary on the *Cakradatta*,⁸⁰ and the *Vīrasimhāvaloka*. It is also recorded in manuscript catalogues as *Vṛṇḍagrantha*,⁸¹ *Vṛṇḍavaidyaka*,⁸² *Vṛṇḍavaidyakaśāstra*,⁸³ and *Vīravṇḍabhaṭṭa*'s *Vṛṇḍa*.⁸⁴ *Vṛṇḍamādhava* is a second title of the *Siddhayoga*.⁸⁵ Manuscript catalogues mention a *Vaidyavṛṇḍa*,⁸⁶ *Vṛṇḍasaṃhitā*,⁸⁷ and *Vṛṇḍasindhu*,⁸⁸ works which may or may not be identical with the *Siddhayoga*. A *Pathyāpathyavidhi* by *Vṛṇḍa* is also known,⁸⁹ as well as a *Siddhayogasamgraha*, said to be an abridgment of the *Siddhayoga* by the author himself.⁹⁰

The quotations prove that *Vṛṇḍa*'s work became well known and remained popular, at least until the times of *Cakrapāṇidatta*.⁹¹ Later, *Hemādri* still quoted from it extensively.

Special features⁹²

The *Siddhayoga* contains the earliest descriptions of two new diseases, *snāyukaroga* and *vardhma*.

The pathogenesis, symptoms and treatment of *snāyukaroga*, i.e., *dracontiasis* or the Guinea worm disease,⁹³ caused by the infestation of the human organism by a nematode, *Dracunculus medinensis* Linn., is lucidly described in the last part of the chapter on *visphoṭa* (55.15–19). The commentary refers to the fact that this disorder is prevalent among the inhabitants of western countries.⁹⁴

The aetiology, etc., of *vardhma* is dealt with in the chapter on *vṛddhi* (40.20–23). This disorder, incidentally referred to earlier,⁹⁵ acquired an independent status after *Vṛṇḍa* characterized it as such.⁹⁶ The identity of this disease, showing distinctive swellings in the groins, has still to be determined.⁹⁷

Vṛṇḍa employs the term *nīścāraka* for a type of diarrhoea.⁹⁸ The *vāta* disease called *kubjatva* (hump-backedness), absent from the *Mādhavanidāna*, but mentioned by *Caraka*⁹⁹ and *Vāgbhaṭa*,¹⁰⁰ is described by *Vṛṇḍa* (22.34).

Noticeable features of the *Siddhayoga* with respect to treatment are: the prescription, probably the earliest one recorded, of *pārasīyavānī*¹⁰¹ against worms inside the body (7.1) and of an ointment made of the juice of *dhattūra*¹⁰² and mercury (*rasendra*) against lice (7.13); a decoction of *aśoka* bark is prescribed against uterine bleeding (63.5);¹⁰³ the medicine against eye diseases called *nāgārjunavarti*, the formula of which is said to have been written by *Nāgārjuna* on a pillar in *Pāṭaliputra* (61.148–152), may be

found for the first time in the *Siddhayoga*.¹⁰⁴ Many more recipes occurring in Vṛnda's work are remarkable and deserving of further study.¹⁰⁵

The *Siddhayoga* is one of the earliest therapeutic works to prescribe ābhā.¹⁰⁶ Interesting is the use of the plant name kāmācī instead of kākamācī¹⁰⁷ and the description of the plant called vārāhikanda.¹⁰⁸ Opium and Cannabis are absent from Vṛnda's materia medica and iatrochemistry is still of small importance.¹⁰⁹

Religious elements are not uncommon in the treatments described in the *Siddhayoga*.¹¹⁰ A yantra, called ubhayatriṃśaka, is also described.¹¹¹ Prāṇāyāma is recommended in patients suffering from śūla.¹¹² A single reference to śūnyatā may point to Vṛnda's acquaintance with Buddhist doctrines.¹¹³

A single piece of evidence is sometimes considered to indicate that an author called Vṛnda wrote some explanatory work. This evidence consists of a remark in the *Kusumavalī*, relating to a group of verses from the *Carakasamhitā*,¹¹⁴ which says that Vṛnda explained a particular compound as a dvandva.¹¹⁵

The author

No particulars about Vṛnda are known, except that he may have lived in Eastern Bengal,¹¹⁶ i.e., the country now called Bangla Desh. Niścalakara mentions that Vṛnda belonged to Varendra, a region referred to in the *Siddhayoga*.¹¹⁷ Confusion on the identity of the author of the *Siddhayoga* was formerly created by Hoernle, who held the opinion that the treatise had been written by Mādhavakara, and claimed that the *Rogaviniścaya* and the *Siddhayoga* were clearly the two parts of a single work by one author.¹¹⁸ Hoernle was unaware of the existence of the *Mādhavacikitsā*.

P.V. Sharma¹¹⁹ is convinced that there were two medical authors of the name of Vṛnda, namely the author of the *Siddhayoga* and a later one, called Vṛndakuṇḍa, who probably descended from Kārttikakuṇḍa. He regards the latter, quoted by Niścalakara and Śivadāśasena, as the author of a commentary on the *Carakasamhitā*, known as *Vṛndaṭīkā* or *-ṭippaṇa*, referred to by Āḍhamalla.¹²⁰ The evidence available is not strongly in favour of this hypothesis. Niścalakara and Śivadāśasena seem to refer indiscriminately to Vṛnda and Vṛndakuṇḍa, and Āḍhamalla mentions an author of glosses, who may well be the author of the *Siddhayoga* himself. A *Vṛndaṭīkā* is quoted in the *Bhāvaprakāśa*.¹²¹

G. Hāldār claimed that Vṛndakuṇḍa, also called Vṛndāvana, was the author of the *Vṛndasindhu* (i.e., the *Siddhayoga*, accompanied by a *ṭippaṇa*) and a work called *Padaviniścaya*.¹²²

Date

Regarding the date of the *Siddhayoga* J. Jolly¹²³ rightly remarked that it must have been composed at least a century before Cakrapāṇidatta, because it had become an authoritative work in the latter's time. The reference to Mādhava's *Rogaviniścaya* in the *Siddhayoga* implies that Vṛnda is posterior to Mādhava. D.Ch. Bhattacharyya¹²⁴

based his date of Vṛnda (A.D. 975–1000) on the absence of borrowings from Māhuka's *Haramekhālā* (dated by him in A.D. 965) and from Candrāṭa (dated by him in A.D. 950), both quoted in Cakrapāṇidatta's *Cikitsāsamgraha*.¹²⁵ He concluded that Vṛnda must have been a contemporary of Candrāṭa and Māhuka, though his arguments do not preclude an earlier date. P.V. Sharma¹²⁶ places Vṛnda in the ninth century on account of the mention of Jejjāṭa in the *Siddhayoga*.¹²⁷ Jejjāṭa's date, however, is earlier in my opinion. The allegation, emanating from M.Z. Siddiqi,¹²⁸ that the *Siddhayoga* is referred to by Ibn Wāḍiḥ al-Ya'qūbī,¹²⁹ who lived in the second half of the ninth century, can be dismissed, since the work mentioned by this Arab author proves to be Ravigupta's *Siddhasāra*.¹³⁰

The conclusion to be drawn concerning Vṛnda's date is that he lived later than Mādhava, the author of the *Nidāna*, and earlier than Cakrapāṇidatta, probably in the period 800–950.¹³¹

A work related to the *Siddhayoga* is Balibhadra's¹³² *Vṛndasamgrahaśeṣa*, known in a single, old, incomplete MS.¹³³

Commentaries

The only commentary on the *Siddhayoga* that has been preserved is the *Vyākhyā-kusumāvalī*.¹³⁴ Stray evidence shows that this has not always been the case, for the *Kusumāvalī* contains two references to an earlier commentary,¹³⁵ and Śivadā-sasena's commentary on the *Cakradatta* quotes Candrāṭa's *Vṛndaṭīkā*.¹³⁶ Furthermore, Āḍhamalla¹³⁷ cites the author of a *ṭippaṇa* on Vṛnda, whose opinions disagree with those found in the *Kusumāvalī*. Hemādri's quotations from Vṛnda contain short remarks which impress as being from an unknown commentary.¹³⁸

P.K. Gode¹³⁹ assumed that a commentary on the *Siddhayoga* had been written by Brahmadeva, an author often quoted in the *Kusumāvalī*.¹⁴⁰ Careful study of these quotations¹⁴¹ revealed that the majority refer to verses taken from or inspired by Suśruta, which shows that Brahmadeva's commentary on the *Suśrutasaṃhitā* is concerned. The idea, put forward by P.V. Sharma,¹⁴² that Naradatta, Cakrapāṇidatta's teacher, wrote, besides a commentary on the *Carakasamhitā*, also one on the *Siddhayoga*, cannot be substantiated, being based on a single reference to a *Naradantavyākhyā*.¹⁴³

The *Vyākhyākusumāvalī*, as it is called in the introductory verses, or, for short, *Kusumāvalī*, is a highly valuable commentary, originally written by Śrīkaṇṭhadatta,¹⁴⁴ and, later on, enlarged by Nārāyaṇa. D.Ch. Bhattacharyya¹⁴⁵ was one of the first to observe that it had not generally been noticed that the *Kusumāvalī*, as it has come down,¹⁴⁶ is actually a revision by a later author, as is evident from its concluding verses where Nārāyaṇa states to have completed Śrīkaṇṭhadatta's commentary by adding notes from Dalhaṇa, etc. This statement led J. Jolly¹⁴⁷ astray, who claimed that the *Kusumāvalī* could not have been written before the fourteenth century.¹⁴⁸

A study devoted to this Nārāyaṇa was written by P.K. Gode.¹⁴⁹ At the end of the *Kusumāvalī*, Nārāyaṇa relates to be a brāhmaṇa of nāgaravaṃśa stock and a son of the

physician Bhābhalla.¹⁵⁰ The nāgaravaṃśa descent of Nārāyaṇa characterizes him as a resident of Gujārāt.¹⁵¹ The evidence collected by P.K. Gode points to Nārāyaṇa as the grandfather of Ananta, who wrote a work called *Kāmasamūha* in A.D. 1457/1458.¹⁵² This Ananta gives the following information on himself: he belonged to the nāgarajñāti, descended from Bhābhalla, was the son of the mantrin Maṇḍana, a grandson of Nārāyaṇa, and lived in a town founded by Ahimmada.¹⁵³ Indications found in the *Kāmasamūha* point to both Ananta and Maṇḍana being physicians.¹⁵⁴ The data available enable us to conclude that Nārāyaṇa lived towards the end of the fourteenth century.¹⁵⁵

The separation of the two layers present in the *Kusumāvalī* is a difficult task that, nevertheless, can partly be carried out by careful study of the quotations by authors who are earlier than Nārāyaṇa. Fortunately, Niścalakara's references to the views of his guru are for a large part in agreement with opinions expressed in the *Kusumāvalī*, which means that passages of the *Kusumāvalī* that verbally or almost verbally recur in the *Ratnaprabhā* as interpretations ascribed to Niścala's guru are old and not due to Nārāyaṇa.¹⁵⁶ The same applies to Niścala's quotations from Rakṣita (pādāḥ). This state of affairs appears to suggest that Śrīkaṇṭhadatta based himself on the interpretations of his teacher, Vijayarakṣita, in the composition of his commentary on the *Siddhayoga*, for Niścala's guru, by some supposed to be Vijayarakṣita himself, belonged to the line established by Vijayarakṣita and Śrīkaṇṭhadatta.¹⁵⁷

Another source of information is the *Cikitsāmrta* of Gopālādāsa. This author, who lived between A.D. 1350 and 1400, often refers to the *Kusumāvalī* and many (twenty-three) times to Śrīkaṇṭha. He preferred Niścalakara's interpretations (on verses common to *Siddhayoga* and *Cakraḍatta*) to those put forward by Śrīkaṇṭha in the many cases where the views of these scholars clashed.¹⁵⁸ Śivādāsa's references may also prove to be helpful, since he repeatedly quotes Śrīkaṇṭha (datta) in his commentary on the *Cakraḍatta*. The numerous citations from Aruṇadatta, Ḍaḥaṇa and Hemādri in the *Kusumāvalī* can be put to the credit of Nārāyaṇa on the basis of chronological considerations.

Many notes on the names and the identity of medicinal plants from the *Kusumāvalī* were collected by Bāpāl Vaidya.¹⁵⁹

Authors and works quoted or referred to in the *Kusumāvalī* are: Agastya (10.43–51; 80.3), Agniveśa (1.132; 21.5–6; 76.3ab), Ālambāyana (68.5), Aruṇadatta (1.9; 6.19cd; 69.6–7; 82.25), Ātreya (80.1 and 3), Bakula (1.119; 20.24–27), Bāṣpacandra (1.34–35 and 36–37; 6.20; 9.31; 36.17cd; 51.24–28; 72.8ef; 81.41, 42, 46, 48, 51, 52, 56ab), Bhadrāsaunaka (62.15–16; 75.2),¹⁶⁰ Bhagadatta (81.47), Bhāluki (1.151–152; 73.4; 74.33), *Bhārata* (1.244),¹⁶¹ Bhāskara (6.33–42), Bhaṭṭāraka (hariścandra) (6.120cd–121; 80.1 and 3; 81.42, 52, 59),¹⁶² Bhīmadaṭṭa (81.41),¹⁶³ Bhoja (1.140 and 254; 3.7–8; 41.49, three quotations; 71.10; 76¹.12; 76⁶.14; 77.8–9; 78.3 and 5), Bindusāra (1.206ab), Brahmadeva (1.25, 32, 54, 91, 102; 3.23; 30.56; 37.26–27; 47.6cd; 65.1–4; 69.1ab; 70.1; intr. to 76; 76¹.24–27; 76².1–2; 78².12–19), Cakra (pāṇi) (1.36–37, 52, 55, 76, 95, 114, 128, 157, 252, 254; 3.49–51 and 60–61; 4.17–18; 5.19–21, 50, 112ab, 113cd, 114, 120–121; 6.48–53; 8.23–27; 10.23–28 and 29–42; 12.31–35; 15.3cd; 21.10–14; 22.7–9, 13, 72, 74–78; 30.50–52; 47.19–20; 57.28 and 29; 58.29–31 and 65–66; 62.51–53; 70.22–30; 71.13; 80.3),¹⁶⁵ Candranandana

(6.19cd; 9.31; 73.2), Candraṭa (74.16–17),¹⁶⁶ Caraka (passim), Cyavana (10.29–42), Ḍalhaṇa (more than ninety quotations), *Dravyāvalī* (4.27cd–29; 15–17; 21.10–14), Dṛḍhabala (1.140 and 266; 73.16; 74.20; 761.4 and 15; prose between 78.1 and 2; 81.46 and 47), Gadādhara (1.53, 67, 75; 5.112; 6.20 and 24; 16.2; 30.38–39; intr. to 31; 41.51; 46.4cd; 47.21; 57.29; 59.13–14; 61.7 and 193; 74.18 and 33), *Gadaviniścaya* (1.2), *gandhaśāstra* (58.65–66), Gayadāsa (23.62; 44.27; 74.33; 75.28; 761.11 and 12), Gayin (34.11–17; 41.49; 57.1; 61.13–14; 70.4; 71.2 and 9; 766.9–10; prose between 78.1–2; 78.3; 81.72), Gomin (5.113ab),¹⁶⁷ *Gūḍhapadabhaṅga(tippanaka)* (41.49), *Haramekhala* (35.21), *Haramekhalā* (57.84), Hariścandra (1.68; 6.9–10; 35.40–42; 77.1),¹⁶⁸ Hārta (1.53ab and 62; 6.20; 8.1; 11.14–17), Hemādri (1.51–52; 6.19cd; 13.7–8; 82.25 and 27), Īśāna(deva) (1.21 and 233; 10.23–28; 19.1; 22.5cd; 36.17cd; 81.17 and 18; 82.27), Īśvarasena (81.52), Jaijāta or Jejjāta (1.254; 4.25–26 and 30–35; 6.19ab and 33–42; 10.11–13; 15.17; 20.24–27; 22.72; 34.11–17; 41.49; 44.5, 27 and 32; 47.21; 49.1; 58.29–31; 61.60, 68, 118; 62.42; 71.10; 73.21; 74.33; 762.1–2; 80.1), Jātūkarṇa (1.63 and 121; 4.27cd–29; 10.23–28; 11.14–17; 37.26–27; 39.29–33; 58.65–66; 59.16–22; 61.6; 77.1), Jinadāsa (10.23–28; 44.32 and 55), *kāmasāstra* (70.42), Kārikāyana (5.41–44), Kapibala (81.46), Karāla (59.13–14; 60.12–13), Kārttika(kuṇḍa) (1.40, 44ab, 67, 68, 231cd, 238, 254; 12.22–24; 14.1 and 2; 16.4 and 8; 17.9; 22.20; 30.16; 33.2 and 3ab; 37.42; 47.13; 48.5; 54.4; 57.29; 58.27 and 29–31; 59.30; 61.193; 70.8–9; 74.32; 75.33; 761.16), kāśmīrāḥ (74.16–17), Kāśyapa (3.16–17; 70.3; 75.27), *Kātantra* (20.28–29), Khāraṇādi (1.134; 6.19), Kṛṣṇātreyā (4.15; 10.23–28; 20.28–29; 77.1; 79.1, 3, 12), Kṣārapāṇi or Kṣīrapāṇi (6.20; 30.60; 37.8), Kusumāvalikāra (766.13), *Lakṣmaṇatippaṇa* (70.48–49), Mādhava (1.25; Śrīmādhava; 2.1: Mādhavakāra's *Nidānasamgraha*; 10.43–51: Mādhavakāra's *Yogavyākhyā*; 27.1: Mādhavakāra's *Rugviniścaya*; 61.9: Mādhava; 81.3: Mādhava), mahārāṣṭrakāḥ (6.1175), maharṣivacana (4.23; 6.120–121), *Mahāvīdeha* (77.8–9), Medhāvin (5.120–121),¹⁶⁹ Munidāsa (10.23–28), Nāgārjuna (6.14; 15.15: *Nāgārjunavārttāmālā*; 61.148–152),¹⁷⁰ Naradanta (44.32; 57.71: naradantavyākhyāsampradāya), *Nidānasamgraha* (58.29–31 and 52cd),¹⁷¹ *Nighaṇṭu* (39.5–6), *Nighaṇṭukāra* (1.201), Nimi (61.13–14; 72.12; 75.27; 77.1 and 8–9), pākhaṇḍikālī (81.59),¹⁷² Pañjikākāra (59.26), paramācārya (5.120cd–121), Parāśara (1.40; 3.49–51 and 69), *Prājāpatya* (81.46), Punarvasu (4.15), *rasarasāyanavāda* (3.69), *ratnaparikṣaśāstra* (22.13), Punarvasu (4.15), Rakṣita (69.23–27),¹⁷³ Ravigupta (10.29–42), *Rugviniścaya* (1.2; 27.1; intr. to 54), śālākinaḥ (79.3), *śālākya* (79.10), śālākyavidalī (78.3), *Samgraha* (82.25 and 27, several times),¹⁷⁴ *Samgrahakāra(ka)* (1.224–225; 30.32; 41.33; 44.46), Sātyaki (61.9), Śaunaka (82.27),¹⁷⁵ *śauśruto granthaḥ* (31.9–10), Soma (82.1–2 and 8–9), *Somatippaṇa* (80.1, 4, 14, 26–27; 81.3 and 18), *Somavyākhyā* (1.7), Śrīkaṇṭhapāṇḍita (73.15), Sūdāntasena (8.6; 72.3), *sūdaśāstra* (18.18; 62.45), Suśruta (passim), *tantrāntara* (many times), *tantrāntariyāḥ* (1.214ab; 5.117–119; 10.84–85; 79.1 and 3; 35.40–42; 81.43–44), *ṭīkākarālī* (1.99cd; 10.29–42), *ṭīkākr̥t* (51.24–28), *ṭīkākr̥tḥ* (9.21ab and 25), *tippanī* (23.34–42; 37.31–34), Udbhaṭa (1.49), *Upaskāra* (47.13), Vāgbhaṭa (1.25; 5.117–119; 6.19cd; 9.31; 41.54; 57.84; 58.65–66; 65.6cd; 70.1; 766.4 and 9–10; 77.8–9; 81.79; 82.20–24, 25, 27), vaidyāḥ (3.9 and 60–61; 23.28; 762.1–2; 764.1–3), *Vaidyaka* (81.17), *Vaidyakaśiddhānta* (81.3), *Vaidyaprasāra* (1.128; 4.17–

18; 9.49–56; 11.28–29; 30.27–28; 37.59–61; 40.24–26; 51.22 and 107–110; 58.65–66; 61.170–171; 62.51–53), Vaikāraṇa (58.45cd),¹⁷⁶ Vaṛgasena (9.19), Videha (1.244 and 263; 4.17–18; 59.13–14 and 30; 61.5, 7, 26, 188; 76.11; 77.8–9; 78, 3, 4, prose between 10 and 11, 12, 19; 79.7), Viśvāmītra (5.111 and 112; 30.40–43; 33.2; 66.1), vṛddha (13.4), vṛddhāḥ (1.205; 81.46), Vṛddhakāśyapa (12.22–24), Vṛddhasuśruta (1.55; 5.64–67), Vṛddhavāgbhāṭa (71.3; 76⁶.14; prose between 78.1 and 2; 78.4 and 11), and vṛddhavaidyāḥ (1.49, 89, 90, 91, 158, 205; 3.9 and 22; 10.43–51; 22.74–78; 25.30–33; 51.107–110; 71.19–20; 75.9).

The author of the *Kusumāvalī* consulted many manuscripts¹⁷⁷ and mentions repeatedly variant readings.¹⁷⁸

Important are the references to Vṛnda in the text of the commentary. Vṛnda is mentioned ad *Siddhayoga* 1.49, 54, 205, 232; intr. to chapter 2; 2.20; 3.22, 49–51, 60–61; 4.16; 5.19–21 and 113ab; 10.2–3; 11.14–17; 12.22–24 and 25–30; 4.16; 20.30; 22.7–10 and 67–71; 25.30–33; 27.1; 34.10 and 11–17; 39.5–6 and 29–33; 41.53; 51.24–28; 57.8cd–9; 58.29–31; 64.11–17; 65.18; 69.34. The majority of these remarks identify verses or parts of verses composed by Vṛnda and often called ṭippana, ṭippanī or ṭippanikā. Minor changes in the wording of verses borrowed from an earlier work are also indicated. The explanations of the commentator show that Vṛnda often chose to follow old medical traditions (vṛddhavaidyavyavahāra), not hesitated in deviating from Caraka,¹⁷⁹ accepted teachings from works not mentioned by name,¹⁸⁰ or agreed with the views of Kārttika(kuṇḍa).¹⁸¹ Vṛnda's views are sometimes criticized in the *Kusumāvalī* as based on confusion¹⁸² or as being not attractive.¹⁸³ A few references to Vṛnda¹⁸⁴ may imply that he added explanations to the text of his treatise,¹⁸⁵ unless they allude to an earlier, but lost, commentary. An unidentified Vṛndaṭippanākāra, quoted by Ācāhamalla,¹⁸⁶ may also be a commentator on the *Siddhayoga*.

The *Kusumāvalī* is quoted in Gopālādāsa's *Cikitsāmrta*.¹⁸⁷ Nārāyaṇa refers in his revised version to the *Kusumāvalikāra*.¹⁸⁸ Śivadāśasena repeatedly employs the term vṛndaṭippanī or -ṭippanikā when the *Vyākhyākusumāvalī* is meant.¹⁸⁹ Jīvanandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha* contains a quotation from Śrīkaṇṭha¹⁹⁰ that cannot be but from the *Kusumāvalī*. The *Vyākhyākusumāvalī-kāra* and Śrīkaṇṭha are quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

Nārāyaṇadāsa and Nārāyaṇāntaraṅga are quoted in the comments on Govindase-na's *Paribhāṣāpradīpa*.

Chapter 7

Cakrapāṇidatta

Cakrapāṇi(datta)¹ was the author of the (1) *Cikitsāsāṃgraha*, (2) *Dravyaguṇasaṃgraha*, (3) *Vyagradaridraśubhaṃkara*, (4) a commentary on the *Carakasamhitā*, called *Āyurvedadīpikā*,² and (5) a commentary on the *Suśrutasaṃhitā*, called *Bhānumatī*.³ Other works, sometimes attributed to him, are the *Gūḍhavākyabodhaka*,⁴ *Muktāvalī*,⁵ *Sarvasārasaṃgraha*,⁶ and *Vyākaraṇatattvacandrikā*.⁷

1 The *Cikitsāsāṃgraha*

The *Cikitsāsāṃgraha*,⁸ also called *Cakradatta* and *Cakra(datta)saṃgraha*, is a therapeutic treatise of the same type as Vṛnda's *Siddhayoga*.⁹

Contents

The work consists of about 4,800 verses and some prose,¹⁰ arranged in seventy-nine chapters. The maṅgalācaraṇa is in praise of the Trimūrti. In the second verse the author, who calls himself Cakrapāṇi, declares to have made a collection of various famous formulae, accompanied by explanations of obscure meanings (gūḍhavākyabodhakavākya). After a verse on the basic attitude to be adopted by a therapist, Cakrapāṇi begins at once expounding the rules concerning the treatment of fevers. Verses on nidāna are absent.¹¹

Chapters one to sixty-five are arranged in conformity with the scheme of the *Mādhavanidāna*, except for a number of minor deviations. These changes consist of separate chapters on jvarātisāra, śūla and pariṇāmaśūla, udāvarta and ānāha, udara and plīhayakṛt (swelling of spleen and liver);¹² the *Cakradatta* has one chapter only on all kinds of vṛaṇa, called vṛaṇaśoṭha; visarpa and visphoṭa are dealt with in one chapter; three chapters are devoted to women's diseases, namely asṛgdara, yonivyāpad and strīroga.¹³ The disease yonikanda, described for the first time in a separate chapter of the *Mādhavanidāna*, is mentioned in the chapter on yonivyāpad under the name of bhagaphala.¹⁴

Nīścalakara, the author of a commentary on the *Cakradatta*, does not acknowledge a separate chapter on dāha, as the *Mādhavanidāna* and *Siddhayoga* have.¹⁵

The order of some chapters of the *Cakradatta* differs from that found in *Mādhavanidāna* and *Siddhayoga*. The chapter on bhagna is placed between those on śūkadoṣa and kuṣṭha, whereas the *Mādhavanidāna* and *Siddhayoga* put it between those on vṛaṇa and nāḍivṛaṇa.¹⁶

The order of the kṣudrarogas disagrees with their arrangement in the *Mādhavanidā-*

na.

The chapters on treatment of the various diseases are followed by eleven chapters, concerned respectively with rasāyana, vṛṣya (= vājīkaraṇa), sneha, sveda, vamaṇa, vinecana, anuvāsana, nirūha, nasya, dhūma, and kavala. The *Siddhayoga* has a similar series of chapters. The last three chapters of Cakrapāṇi's treatise are devoted to preparations used in the treatment of eye diseases (āścyotana, añjana, tarpaṇa, puṭapāka), bloodletting, and the preservation of health (svastha). Unlike the *Siddhayoga*, the *Cakradatta* has no chapters on aṣṭas and on miscellaneous subjects. The work ends with two verses containing information on the author and his treatise.

The main source for the composition of the *Cikitsāsamgraha* was obviously Vṛnda's *Siddhayoga*, which strikes the eye when both works are compared. Indications in the text itself concerning its sources are small in number. Caraka and Suśruta are referred to on a number of occasions.¹⁷ The latter part of the chapter on children's diseases consists of a reproduction of Rāvaṇa's *Kumāratantra*;¹⁸ a large part of the chapter on rasāyana (34–125) is a paraphrase of Nāgārjuna's *Lohaśāstra*;¹⁹ a nāgārjunayoga is found in the chapter on haemorrhoids (arśas 61–70); the śilājatuvidhāna, found in the same chapter (152–158), was borrowed from Caraka,²⁰ as indicated in the text itself;²¹ the formula of śivaguṭikā (rasāyana 172–195), taught by Śiva to Gaṇapati, is said to be from the *Śaivasiddhānta*.²²

Noteworthy among the authorities to whom recipes are ascribed are Agastya (kāsa 61–66),²³ the Āśvins,²⁴ a Bodhisattva (arśas 105–106),²⁵ Jīvaka (ślīpāda 24–30),²⁶ Kaca (mūtrāghāta 10),²⁷ and Kṛṣṇātreya (kaṇṇaroga 18–22).²⁸

Numerous references to works and authors exploited by Cakrapāṇi in the composition of his *Samgraha* occur in the commentaries of Nīścalakara and Śivadāśasena.

The former's *Ratnaprabhā* is a very rich mine of information on the subject.²⁹ It indicates as sources utilized by Cakrapāṇi: Agniveśa, Amitaprabha, Amṛtamālā, Aśvavaidyaka, Aśvinīkumārasaṃhitā, Ātreya, Āyurvedasāra, Bhadravarman, Bhālu-ki, Bhela, Bhiṣagmuṣṭi, Bhoja, Bindusāra, Brhattatantrapradīpa, Cakṣusyeṇa, Candrāta, Caraka, Carakottaratāntra, Cikitsākalikā, Cikitsātiśaya, Dṛḍhabala, Gandhaśāstra, Hāramekhalā, Hārīta, Jatūkarna, Kālapāda, Kharanāda, Kṛṣṇātreya, Kṣārapāṇi, Lohaśāstra, Mādhavakara, Nāgārjuna, Nalanṛpati's *Sūdasāstra*, Nāvanīta, Parāśara, Prthvīsiṃha, Puṣkalāvata, Ratnamālā, Ravigupta, Śālihotra, Śaunaka, Siddhasāra, Siddhayoga, Śivasiddhānta, Sūdasāstra, Suśruta,³⁰ Svalpavāgbhaṭa, tantrāntara, Tīsaṭa, Ugrasena, Vāgbhaṭa, Vṛddhasuśruta, Vṛddhavāgbhaṭa, Vṛddhavedha, Vyagradarīdraśubhaṅkara, Yogapañcāśikā, Yogaśata, and Yogayukti.

Some sources mentioned by Śivadāśasena are: Agniveśa (jvara 64), Āyurvedasāra (jvara 105), Bhela (jvara 182–183), Candrāta (vraṇaśoṭha 52; vṛṣya 15–24), Caraka (often), Hārīta (jvara 71; gulma 43–44), Kṛṣṇātreya (chardi 17–18), Suśruta (often), and Vāgbhaṭa (often).

Cakrapāṇi's relationship to Vṛnda is to some extent clarified by Nīścala, who repeatedly records stanzas of Vṛnda changed by Cakrapāṇi,³¹ verses added to those by Vṛnda, and formulae of the *Cikitsāsamgraha* which are absent from the *Siddhayoga*.³² Many verses which Cakra simply took from the *Siddhayoga* are, however, not indicated by Nīścala as deriving from this source.³³

Śivadāsasena records a number of cases where Cakra disagrees with Vṛnda.³⁴

Cakra's respect for Vṛnda is revealed by the imprecation at the end of the *Cikitsā-saṃgraha*: "The curse uttered by those who know the *Bhaṭṭatraya*³⁵ and the three Vedas may at once come down on the head of him who includes formulae, which are not written down in the *Siddhayoga*, in this treatise, or who removes a single one from it".

The success of Cakrapāṇi's *Samgraha*, which ousted Vṛnda's *Siddhayoga*, may be due to its inclusion of a rather large number of new formulae, containing inorganic substances such as mercury, sulphur, metals, and compounds of these. The verses with the formula of one of these medicines were composed by Cakrapāṇi himself, as indicated in the text.³⁶ Some prose passages from the *Suśrutasaṃhitā*, containing lists of plants and other medicinal substances belonging to a particular group (*gaṇa*), were versified by Cakrapāṇi, as attested by Nīścala.³⁷ The commentaries of Nīścalakara and Śivadāsasena on the *Cakraḍatta* contain additional information on verses composed by the author or deliberately changed.³⁸

*Special features*³⁹

Among the special features of Cakra's *saṃgraha* the medicines containing mercury or mercurial compounds should be noted first. These are chiefly found at: *grahaṇī* 85–90 (*rasaparpatikā*)⁴⁰ and 91–97 (*tāmrayoga*); *arśas* 177 (*rasaguṭikā*); *agnimāndya* 28–29 (*pāṇīyabhaktaguṭikā*); *krimi* 10 (= *Siddhayoga* 7.13); *yakṣman* 30–34 (*rasendraguṭikā*); *pariṇāmasūla* 51–53 (*rasamaṇḍūra*); *plīhayaḥ* 41–47 (*lokanātharasa*); *amlapitta* 38–50 (*kṣudhāvatī guṭikā*); *masūrīkā* 7.⁴¹

Medicines containing metals, especially iron, or their compounds, are found at:⁴² *arśas* 161–168 (*agnimukhalauha*) and 169–176 (*bhāllātakalauha*);⁴³ *pāṇḍuroga* 11–12 (*navāyasaḥloha*),⁴⁴ 13–19 (*yogarāja*), 34–35 (*viḍaṅgādyalauha*), 36–41 (*tryuṣaṇādyamaṇḍūra*),⁴⁵ 42–44 (*punarnavāmaṇḍūra*),⁴⁶ 45–48 (*maṇḍūravajravatāka*);⁴⁷ *raktapitta* 82–97 (*khaṇḍakādyalauha*),⁴⁸ *yakṣman* 28–29 (*vindhyavāsīyoga*); *sūla* 50–57 (*dhātrīlauha*); *pariṇāmasūla* 13 (*triphalālauha* and *-maṇḍūra*),⁴⁹ 14 (*pippalyādila*),⁵⁰ 15 (*pathyādila*),⁵¹ 16–19 (*sāmudrādyacūrṇa*),⁵² 21–22 (*saptāṃṣṭhalauha*), 25 (*kolādimāṇḍūra*),⁵³ 26–28 (*bhīmavataḥkamaṇḍūra*),⁵⁴ 29 (*kṣīramaṇḍūra*),⁵⁵ 30–31 (*cavikādimāṇḍūra*), 32 (*maṇḍūra* and *lauhaprayoga*), 33–35 (*śatāvarīmaṇḍūra*),⁵⁶ 36–41 (*tārāmandūraguḍa*),⁵⁷ 42–45 (*rāmamaṇḍūra*), 46–50 (*bṛhacchatāvarīmaṇḍūra*), 51–53 (*rasamaṇḍūra*), 54 (*triphalālauha*),⁵⁸ 55–56 (*lauhaguṭikā*), 57–62 (*dhātrīlauha*),⁵⁹ 63–68 (*lauhāmṛta*); *sthaulya* 6–9 (*viḍaṅgādyalauha*) and 19–29 (*lauharasāyana*); *kuṣṭha* 152 (*sindūrādyataila*)⁶⁰ and 153–156 (*mahāsindūrādyataila*);⁶¹ *amlapitta* 38–50 (*kṣudhāvatī guṭikā*); *netraroga* 125–129 (*nāgārjunavartī*);⁶² *yonivyāpad* 30; *rasāyana* 129–135 (*śaḍaṅgātāmrayoga*) and 136–151 (*saptāṅgātāmrayoga*).

Alchemical processes are described: *amlapitta* 27–29 (*abhraśuddhi*), 30–32 (*lauhaśuddhi*), 33–34 (*maṇḍūraśuddhi*), 35 (*rasaśuddhi*), 36–37 (*gandhakaśuddhi*); *rasāyana* 34–50, 51–62 (*lauhamāraṇavidhi*), 63–64 (*bhānupāka*), 65–66 (*sthālipāka*), 67–75 (*puṭapāka*), 76–91 (*pāka*), 92–97 (*abhrakavidhi*), 98–122 (*bhakṣaṇavidhi*), 123–125.

A noteworthy name of a disease is *ahiṇḍikā* (*bālaroga* 7);⁶³ some recipes are given for its treatment (*bālaroga* 8–10).⁶⁴

Cakrapāṇi added a fair number of single or compound medicines to those collected by Vṛnda.⁶⁵ Some of these are:⁶⁶ the fresh juice from the leaves of śephālī in fevers (jvara 214), ankoṭhavaṭaka in diarrhoea (atisāra 58–60), nāgārjunayoga (arśas 61–70) and vijayacūrṇa (arśas 71–77) in haemorrhoids, powdered lotus seeds (padmabījacūrṇa; kṣā 16) in cough due to pitta, vyāghrīharitākī (kṣā 67–70) in coughs, mayūrapuccādhileha (hikkāśvāsa 17) in hiccup and shortness of breath, kalahaṃsa (arocaka 18–19) in anorexia, aśvatthavalkalapāṇīya (chardi 25) in vomiting, dhustūramūlasiddhapāyasa (unmāda 6) in insanity, śephālīkvātha (vātavyādhi 43) in gr̥dhrasī, siṃhaṇādaguggulu (āmavāta 39–47) and rasonasurā (āmavāta 71–73) in āmavāta, rudrajaṭālepa (vṛddhi 20), rūpikālepa (vṛddhi 21), hastikarṇapalāśalepa (galagaṇḍa 2), karpāsamūlapūpikā in apacī (galagaṇḍa 27), bhūnāgacūrṇalepa (bhagandara 10) in anal fistulas, etc. Some more new prescriptions are: irimedādyataila (mukhagataroga 19–24), bakulādyataila (mukhagataroga 28–29), and citrakaharītākī (nāsāroga 31–33).⁶⁷

Cakrapāṇi's chapter on strīroga, longer than the chapter on the same subject in Vṛnda's *Siddhayoga*, adds recipes suitable to making flabby breasts firm (strīroga 62–66), tightening the vagina (67), and promoting the husband's interest in his wife (68–69).

To be noticed too is the increased use of substances of animal origin and of prescriptions with a Tantric flavour.⁶⁸ Mantras are repeatedly employed. Cakrapāṇi describes two yantras, the ubhayatṛiṃśaka, already known to Vṛnda, and the ubhayapañcadaśaka (strīroga 25–27), both thought to assure a pregnant woman of an easy delivery.

Noteworthy vegetable substances mentioned in the *Cakradatta* are:⁶⁹ āhā (vātavyādhi 72),⁷⁰ ahindra (rājayakṣman 7),⁷¹ aindrī (galagaṇḍa 21),⁷² amloṭa (jvara 223),⁷³ aruṇaṇḍulīyaka (masūrīkā 23 and 24),⁷⁴ aśanamallikā (nāsāroga 28),⁷⁵ asitavetra (visarpa 21),⁷⁶ avākpūspī (arśas 129),⁷⁷ bṛhatpattrā (amlapitta 31),⁷⁸ cakrāhvaya (kuṣṭha 32),⁷⁹ carmakārāluḥka (vr̥ṣya 25),⁸⁰ celaka (vātavyādhi 300),⁸¹ cāmpēya (vātavyādhi 230),⁸² cukrīkā (tṛṣṇā 22),⁸³ daṇḍotpala and daṇḍotpalā (arśas 169; galagaṇḍa 33; amlapitta 43),⁸⁴ devapūspī (vātavyādhi 268),⁸⁵ dvika (mukharoga, mukhagataroga 30),⁸⁶ ekaiśikā (vraṇaśoṭha 8),⁸⁷ elaka or elakā (ślīpada 31),⁸⁸ gajacirbhīta (gulma 40),⁸⁹ gandhapattraka (vātavyādhi 300),⁹⁰ gaṅgāpālānika (arśas 177),⁹¹ gaurā (vraṇaśoṭha 78),⁹² godhāvatī (mūtrāghāta 11; ślīpada 15),⁹³ guḍapūṣpa (agnimāndya 89),⁹⁴ hastikarṇa or hastikarṇapalāśa (galagaṇḍa 2; rasāyana 19), also called karikarṇacchada (rasāyana 55),⁹⁵ indrāśana (kuṣṭha 64),⁹⁶ irima (mukharoga, mukhagataroga 25),⁹⁷ jalakarṇā (rājayakṣman 31),⁹⁸ jalakumbhīka (galagaṇḍa 6),⁹⁹ jūṅgikā (prameha 8),¹⁰⁰ jīrākhya (raktapitta 94),¹⁰¹ jyotsnikā (arśas 6 and 113),¹⁰² kālā (galagaṇḍa 43; vraṇaśoṭha 8 and 101; nāḍīvraṇa 5),¹⁰³ kālāmāriṣa (amlapitta 39),¹⁰⁴ kālāvakarāka (amlapitta 43),¹⁰⁵ kalāyavidalī (vraṇaśoṭha 67),¹⁰⁶ kañcaṭa (atisāra 38; grahaṇī),¹⁰⁷ kaṅgunikā (nāḍīvraṇa 9),¹⁰⁸ kāntakrāmaka (vraṇaśoṭha 53),¹⁰⁹ kaṇṭākumbhāḍu (masūrīkā 5),¹¹⁰ kapotavaktraka (aśmarī 3 and 26),¹¹¹ karabhavāruṇī (vr̥ṣya 57),¹¹² karṇākhya (jvara 209),¹¹³ karṇamoṭa (vraṇaśoṭha 40),¹¹⁴ kaśikā (pariṇāmaśūla 63),¹¹⁵ keśarāja (pariṇāmaśūla 51; amlapitta 39 and 43; bālāroga 15; rasāyana 55 and 66),¹¹⁶ kaṭumbharā (vātavyādhi 230),¹¹⁷ khadirī (mūtrāghāta 12),¹¹⁸ khaṇḍakarṇa (amlapitta 27 and 43),¹¹⁹ kolā (pariṇāmaśūla 25),¹²⁰ kṛṣṇavetra (kuṣṭha 61 and 154),¹²¹ kūḍakarāṇī (viṣa 25),¹²² kukkurameṇcukā (strīroga 58),¹²³ kulikā (viṣa 6),¹²⁴

kuṭhāra(ka) (vraṇaśoṭha 49, 90, 91),¹²⁵ lavalikā (mukharoga, mukhagataroga 30),¹²⁶ lomaśa (kuṣṭha 9),¹²⁷ maghī (masūrikā 5),¹²⁸ madhurī (vātavyādhi 254 and 268),¹²⁹ mahārāṣṭrī (vraṇaśoṭha 47),¹³⁰ nakhī (vātavyādhi 269),¹³¹ naravṛkṣa (kṣudraroga 123),¹³² nirdahanī (śūla 45),¹³³ palāśa (hṛdroga 28),¹³⁴ pamarā (vātavyādhi 269),¹³⁵ peṭī (bālaroga 32),¹³⁶ pratyāṅgirā (viṣa 2),¹³⁷ rudrajaṭā (mūtrāghāta 12; vṛddhi 20),¹³⁸ śālīṇca (amlapitta 28 and 30; rasāyana 56),¹³⁹ śārada (prameha 2),¹⁴⁰ sikaṭī (masūrikā 5),¹⁴¹ śītalī (aśmarī 37),¹⁴² sphuṭaka (bālaroga 13),¹⁴³ srāviṇī (vātarakta 75),¹⁴⁴ śrgālakantaka (masūrikā 8),¹⁴⁵ śrgālakolī (vraṇaśoṭha 58),¹⁴⁶ śvetabalā (yonivyāpad 32),¹⁴⁷ śvetajayantī (kuṣṭha 74),¹⁴⁸ śvetavāṭyāla (pariṇāmaśūla 42; amlapitta 33),¹⁴⁹ taila (rājayakṣman 88),¹⁵⁰ tālamastaka (asṛgdāra 23; vṛṣya 36 and 40),¹⁵¹ tṛṇaka (kuṣṭha 24 and 132),¹⁵² tvakpattra (vireka 3),¹⁵³ uṣṭrakantaka (masūrikā 7),¹⁵⁴ and vaśīra (aśmarī 2–4),¹⁵⁵ An unidentified animal is the karaṭavī (vṛddhi 20).¹⁵⁶

Musk (kastūrī) is a substance that begins to appear more frequently in Sanskrit literature since the Gupta age.¹⁵⁷ The *Cakradatta* prescribes kastūrī (vātavyādhi 230) and describes the characteristics of purified musk (mṛgottamā)¹⁵⁸ (vātavyādhi 293).¹⁵⁹

Another fragrant substance of animal origin mentioned in the *Cakradatta* as pūti (vātavyādhi 289) and śālija (vātavyādhi 297) is civet.¹⁶⁰

2 The *Dravyaguṇasaṃgraha*

The *Dravyaguṇasaṃgraha*¹⁶¹ is concerned with the medicinal properties of solid and liquid articles of food. On this subject it represents the earliest special treatise that has been preserved.

Contents

This work,¹⁶² based on treatises of predecessors,¹⁶³ consists of 592 verses,¹⁶⁴ divided into thirteen sections (varga):¹⁶⁵ (1) dhānyavarga; after verses on the tastes, vīrya and vipāka, Cakrapāṇi describes the properties of grain, pulse, sesamum, and related articles of diet; (2) māṃsādivarga, on the flesh of a long series of animals and the eggs of some of these; (3) śākavarga, on vegetables; (4) lavaṇādivarga, on types of salt and related substances, spices and condiments; (5) phalavarga, on fruits; (6) pāṇiyavarga, on various types of water and the watery juice from the coconut, young kramuka, and tāla; rules for the use of cold or warm water in diverse disorders, rules for the use of boiled water; (7) kṣīravarga, on milk and dairy produce; (8) tailavarga, on oils and some other fatty substances; (9) aikṣavādivarga, on products of the sugarcane and types of honey; (10) madyādivarga, on alcoholic drinks and other fermented liquids, on types of urine; (11) kṛtānnavarga, on prepared foods of a liquid and semi-liquid nature; (12) bhakṣyavarga, on prepared foods of a solid nature; (13) āhāravidhi, rules for serving and taking food, description of the digestive processes; anupānavidhi, rules for the use of anupānas, i.e., drinks to be taken during or after meals; guṇakarmāṇī, the effects of the qualities of foods and drinks on the human organism; svasthavṛtti, rules about the maintenance of health.

The chief sources of the *Dravyaguṇa* are the *Carakasamhitā* and *Suśrutasaṃhitā*.¹⁶⁶ Cakrapāṇi probably used other works as well and may have composed some stanzas

himself.¹⁶⁷

*Special features*¹⁶⁸

Vīrya is said to be of two, vipāka of three types (dhānya 8–10).¹⁶⁹ The pulse, usually called ādhakī, is described under the name of tuvarī (dhānya 30c).¹⁷⁰ Cakrapāṇi uses the term vātasādhāraṇa (māṃsādi 1.4) for a substance that neither excites nor pacifies vāta.¹⁷¹ Noteworthy is a long series of fishes in the māṃsādivarga,¹⁷² which indicates that Cakrapāṇi was a resident of Bengal, where much fish is consumed.¹⁷³ Vegetables are said to be of six types (śāka 1.2), namely leaves, flowers, fruits, stalks, tubers and mushrooms; this classification was later adopted by Bhāvamiśra. Some vegetables, well known in Bengal and described in Cakrapāṇi's *Dravyaguṇa* are bhūkanda (śāka 2.9),¹⁷⁴ grīṣmasundaraka (śāka 1.28),¹⁷⁵ hilamocī (śāka 1.12),¹⁷⁶ kaccī (śāka 2.12),¹⁷⁷ kañcaṭa (śāka 1.23),¹⁷⁸ māṇaka (śāka 2.10),¹⁷⁹ nāḍīca (śāka 1.29),¹⁸⁰ and the stalks of alābu (śāka 1.48) and kuśmāṇḍa (śāka 1.43). Remarkable items among the fruits are anupākin (phalavarga 31)¹⁸¹ and madhukukkuṭi (phalavarga 25).¹⁸² A type of sugar not mentioned in earlier texts is tamarāja (aikṣavādivarga 12).¹⁸³

3 The *Vyagradaridraśubhaṅkara*

The *Vyagradaridraśubhaṅkara*¹⁸⁴ is mentioned several times in Niścalakara's *Ratnaprabhā*; Gopālādāsa quotes it as the *Vyagradīnaśubhaṅkara* in his *Cikitsāmrta*.¹⁸⁵

Niścala refers to the work as *Śubha*,¹⁸⁶ *Śubhaṅkara*,¹⁸⁷ and *Vyagradaridraśubhaṅkara*.¹⁸⁸ Niścala's quotations and remarks show that it was a treatise in verse, arranged in chapters (prakaraṇa) dealing with a particular type of preparation.¹⁸⁹ The *Vyagradaridraśubhaṅkara* was written before the *Cikitsāsamgraha*, which contains verses borrowed from it.¹⁹⁰ Some other stanzas of the *Cakradatta*, composed by Cakrapāṇi, are adaptations of verses found in his earlier work.¹⁹¹ The *Vyagradaridraśubhaṅkara* is probably referred to, without mentioning its name, in Niścala's remarks ad *śoṭha* 6.¹⁹²

Quotations from Cakrapāṇidatta and his works

Cakra is quoted by Āḍhamalla, in Ambikādattaśāstrin's commentary on the *Rasendraśārasamgraha*, Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*, the *Ayurvedābhisāra* (112), the comments on Govindasena's *Paribhāṣāpradīpa*, Gopālādāsa's *Cikitsāmrta*, Nāganātha's *Nidānapradīpa*, Narasiṅha's commentary on the *Mādhavanidāna*, Niścalakara's *Ratnaprabhā* (very often), Nityanātha's *Rasaratnākara*,¹⁹³ Śivadāsasena's commentaries (on the Sūtrasthāna of the *Carakasamhitā*, Uttarasthāna of the *Aṣṭāṅgahṛdayasamhitā*, Cakrapāṇi's *Cikitsāsamgraha* and *Dravyaguṇa*),¹⁹⁴ Śivadatta's auto-commentary on his *Śivakoṣa*,¹⁹⁵ Śrīkaṇṭhadatta's part of the *Madhukoṣa*¹⁹⁶ and his *Kuṣumāvalī*,¹⁹⁷ Vācaspati's *Ātaṅkadarpaṇa*,¹⁹⁸ and Vijayaraṅga's part of the *Madhukoṣa*.¹⁹⁹

Cakrapāṇi is cited in Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa* and Niścalakara's *Ratnaprabhā*. He is sometimes called Cakradatta by Niścala. Guṛājāśarmamiśra's *Viśikhānupreśavijñāna* contains a quotation from

Cakrapāṇi that has been taken from the *Āyurvedadīpikā* (ad Ca.Si.9.50). Cakrapāṇidatta is quoted in the comments on Govindasena's *Paribhāṣāpradīpa*, Nīścala's *Ratnaprabhā* and Sukhānanda's commentary on the *Vaidyājīvana* of Lolimbarāja.

Authors and works quoting from or referring to the *Cakradatta* are: Āḥamalla, the *Amṛtasāgara*, Āsubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*, the *Āyurvedābhdhisāra* (179) and its commentary (ad 183), the *Āyurvedīya Khani-javijñāna*, *Bhāvaprakāśa*,²⁰⁰ *Bheṣajasaṃhitā*, *Bṛhannighaṇṭurātākara*, Devasiṃha Viṭṭhal's *Bṛhadāsavārīṣṭasaṃgraha*, the comments on Govindasena's *Paribhāṣāpradīpa*, Gulrājśarmamiśra's *Viśikhānupraveśavijñāna*, Hariprapanna's *Rasayogasāgara*, Jivānandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha*, the *Kāmaratna*, *Rasoddhātatantra*, *Ratnasāgara*, Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Śivadāsasena's commentary on the Uttaraśthāna of the *Aṣṭāṅgharḍaya*,²⁰¹ Śivamiśra's *Vaidyaśāstraśivānubhava*, Trimalla's *Yogatarāṅgiṇī*,²⁰² Vāsudeva's *Vāsudevānubhava*, Vinodalāla Sena's *Āyurvedavijñāna*, and the *Yogarātākara*.²⁰³ It is one of the sources of Āryadāsa Kumārasiṃha's *Kvāthamaṇimālā* and the *Rasendrasambhava*.

The *Cakradatta* is quoted as *Cakrasaṃgraha* in the commentaries of Nīścalakara and Śivadāsasena on the work. Nīścala calls it occasionally Cakra's *Svasaṃgraha* and *Yogasaṃgraha*. It is also quoted as *Samgraha* by Nīścala and Śivadāsasena, who call its author *Samgrahakāra* or -kṛt. Hārānacandra (ad Su.Sū.46.294–297) quotes from it as *Cakrapāṇisaṃgraha*.²⁰⁴

Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya* quotes Cakra, Cakrapāṇi, the *Cakradatta*, *Cakrapāṇisaṃgraha* and *Cakrasaṃgraha*. Somadevaśarman's commentary on the *Āyurvedaprakāśa* refers to Cakrapāṇi's *Cikitsāsaṃgraha*.

The comments on Govindasena's *Paribhāṣāpradīpa* quote it as *Cakradatta*'s *Svasaṃgraha* and the *Cakrapāṇikṛtsaṃgraha*. Āsubodha Senagupta's commentary on Govindasena's treatise quotes it as *Cakrasaṃgraha*.

The *Cakradatta* was one of the sources of the *Ma'din al-Šhiṭā*.

The *Dravyaguṇasaṃgraha* is quoted in Gopāla's *Dravyaguṇa* and may have been one of the sources of Ṭoḍara's *Āyurvedasaukhya*.

The author

Cakrapāṇi has provided us with information concerning himself at the beginning and end of his commentary on the *Carakasāṃhitā* and at the end of the *Cikitsāsaṃgraha*.

Cakrapāṇi was the son of Nārāyaṇa, who was the superintendent of the kitchen (rasavatyadhikārin) and a minister (pātra) of a king of Bengal (Gauḍa);²⁰⁵ his elder brother, called Bhānu,²⁰⁶ was a court physician (antaraṅga).²⁰⁷ Cakrapāṇi belonged to the Lodhralī branch²⁰⁸ of the Datta lineage,²⁰⁹ a branch that did not become extinct and is still represented among the inhabitants of Shillong in Meghālaya.²¹⁰

Cakrapāṇi's teacher was Naradatta and his commentary on the *Carakasāṃhitā* was written in agreement with Naradatta's interpretation of this text.²¹¹

Śivadāsasena²¹² adds to this information that Cakrapāṇi's father, Nārāyaṇa, was

a minister (mantrin) of king Nayapāla of Bengal (A.D. 1038–1055).²¹³ Some authors claim that Cakrapāṇi was born in the Vīrabhūma (Bīrbhūm) district of Bengal,²¹⁴ in a place called Mayūragrāma.²¹⁵

The introductory verses of the *Āyurvedadīpikā* and *Cikitsāsāṃgraha*, which are identical and dedicated to the Trimūrti, as well as the first verse of the *Dravyaguṇa*, dedicated to Śiva, show that the author of these works was a Hindu by faith.²¹⁶

Date

The fact that Cakrapāṇi's father, Nārāyaṇa, was in the service of king Nayapāla (1038–1055), establishes that Cakrapāṇi must have written his works in about the third quarter of the eleventh century.²¹⁷

Commentaries

An elaborate commentary on Cakrapāṇidatta's *Cikitsāsāṃgraha* was written by Niścalakara. A later commentary by Śivadāsaśena²¹⁸ is largely based on Niścalakara's work.

Niścalakara

Niścalakara is the author of the very valuable *Ratnaprabhā*.²¹⁹

The author declares in the introductory verses that he gave to his work the title *Ratnaprabhā* because of its objective, namely to restore the brilliance of the *Cakrasāṃgraha* (i.e., the *Cikitsāsāṃgraha*), a gem the glow of which had dimmed on account of misunderstandings after the passing away of the āyurvedaguru Vijayarakṣita. He adds that he intends to attain his object by consulting various treatises and reflecting (gharṣaṇa) on the sayings of his teacher.

The *Ratnaprabhā* is a mine of information, abounding in critical considerations on the contents of the *Cakradatta* and quotations from numerous works, many of which are lost now.²²⁰ Niścala does not limit himself to the clarification of Cakra's text, but expounds his own ideas too. This may be the reason that his commentary is called a *tātparyatīkā*.²²¹ He does not blindly adhere to the teachings of earlier authorities, not even to those of his guru, and records interpretations not accepted by the latter or is even slightly critical of him.

Cakrapāṇidatta is an admired authority, profusely quoted; laudatory epithets are applied to him: carakacaturāṇana, bahuśrutaparīśrutasuśrutasaḥsraṇayana, sakalavaidya(kula)maulimālāmāṇikya, mārjitataraṇanakhamaṇi,²²² he is referred to as prāmāṇikāgraṇi,²²³ because of his refusal to acknowledge uncritically what is generally accepted (na prasiddhim ādriyate) and his habit of carefully examining whether or not a particular opinion has a rational basis (yukta, yuktisiddha).²²⁴ Niścala censures colleagues who blindly follow customary interpretations,²²⁵ Cakrapāṇidatta²²⁶ and Vṛnda²²⁷ not excepted. He assures us that he is not even convinced by opinions based on reasoning; practical results (vyavahārasiddha) should be regarded as the ultimate test of a given practice.²²⁸

Niścāla's commentary gives evidence of the value he attached to establishing a correct text of the *Cakradatta*. He compared its readings with those of the sources and of other treatises,²²⁹ recording variants²³⁰ and errors.²³¹ Criteria applied in determining the appropriateness of a reading are its conformity with the text of other treatises,²³² its acceptance by earlier authorities,²³³ and its value for practice.²³⁴ Reaching a decision was sometimes fraught with difficulties or impossible. Consequently, Niścāla acknowledges in such cases the validity of two or more divergent readings²³⁵ or refrains from judgment.²³⁶

In general, Niścāla tries to solve controversies he discovers when consulting a number of authorities, but, not always feeling able to achieve this aim, he tends to accept two or more conflicting views together with the arguments adduced in support of them.²³⁷

Niścāla's experience as a practising physician emerges from remarks about formulations he prescribed to his patients and found to be effective.²³⁸ Well-known and regularly used recipes are indicated as such.²³⁹

A singular feature of the *Ratnaprabhā* is the occurrence of the names of some of Niścāla's patients. Persons who turned to him for help when suffering from some disorder were the paṇḍit Dhyānakīrti,²⁴⁰ Lokeśvara, who was in charge of the Tantric rituals (mahātantrādhikṛta), the bhikṣu Śāntarakṣita,²⁴¹ and Yatapālita, who held an important position in the royal kitchen (bhojanavīryādhikṛta).²⁴²

The exact procedures in the preparation of compound medicines, the amounts of the ingredients, etc., are very often discussed in detail. The practices prevalent in Niścāla's time and country are described as vyavahāra²⁴³ or pracāra.²⁴⁴ Actual practice did not always conform to the instructions of the authoritative textbooks.²⁴⁵ Agreement with habitual practices is expressed in various ways,²⁴⁶ as is disagreement.²⁴⁷

Traditional views are those attributed to the vṛddhāḥ²⁴⁸ or vṛddhavaidyāḥ,²⁴⁹ and their teachings, the vṛddhavaidyopadeśa²⁵⁰ or vṛddhavaidyavyavahāra.²⁵¹ Niścāla is prone to accept this tradition, although, occasionally, he rejects it.²⁵²

A number of subjects relevant to medical theory and practice are elaborately discussed; examples are some types of parīkṣā,²⁵³ the general treatment of fever,²⁵⁴ the treatment of irregular fevers,²⁵⁵ weights and measures,²⁵⁶ and technical terms.²⁵⁷

The identity of medicinal substances is a subject which is given much attention to. Niścāla not only deals with those occurring in the text of the *Cakradatta*,²⁵⁸ but also with those found in the treatises he quotes. Some noteworthy plant names of these sources are:²⁵⁹ alavaṇā,²⁶⁰ amogha,²⁶¹ arka,²⁶² bāṇā,²⁶³ bhūnīlī,²⁶⁴ devatākusuma,²⁶⁵ guccha,²⁶⁶ jalagaṇḍaja,²⁶⁷ jāmātar,²⁶⁸ kañcukī,²⁶⁹ kandakarna,²⁷⁰ kañṭī,²⁷¹ kāṣṭhapūga,²⁷² kulī,²⁷³ kuliśa,²⁷⁴ laguru,²⁷⁵ modayanī,²⁷⁶ mūlakaparnī,²⁷⁷ odanapākī,²⁷⁸ pāśī,²⁷⁹ phalī,²⁸⁰ raṇḍākhyaṭāla,²⁸¹ ruhā,²⁸² vānūra,²⁸³ vanya,²⁸⁴ veṇāṇa,²⁸⁵ vinayā,²⁸⁶ viśāṇa,²⁸⁷ vr̥kī.²⁸⁸

Local names of disorders, plants, dishes, etc., are repeatedly mentioned.²⁸⁹

Niścāla's training was apparently not restricted to medicine. Several remarks in his commentary reveal his knowledge of other sciences, such as grammar²⁹⁰ and metrics.²⁹¹

The sources of numerous verses of Cakrapāṇidatta's *Cikitsāsāṃgraha* are carefully

recorded by Niścala.²⁹² This does not imply that the stanzas that remain unidentified derive from Cakrapāṇi himself, as a considerable number of them were borrowed from Vṛṇḍa's *Siddhayoga* without any reference to this fact in the *Ratnaprabhā*.²⁹³ A few verses taken from Suśruta are neither indicated as such.²⁹⁴

Authors and works quoted or referred to in the *Ratnaprabhā* are:²⁹⁵ ācārya (sneha 21–22; = Dṛḍhabala), ācāryāḥ (jvara 17 and 21), Acyuta²⁹⁶ (jvara 277–278; masūrikā 32; kṣudraroga 9), Āgama (udara 51; rasāyana 167–189; nirūha 14), *Agnipurāṇa*²⁹⁷ (atīśāra 72), Agniveśa (jvara 17, 41–42, 64; apasmāra 7–8; vamaṇa 14; nirūha 8–10),²⁹⁸ *Akṣadevīya Karmamālā*²⁹⁹ (rājayakṣman 9–12),³⁰⁰ *Akṣadevīya Yogaśata(ka)* (hikkāśvāsa 9; plīhayakṛt 11; karṇaroga 7), *Alpavāgbhāṭa* (mukharoga 58ab, 58cd, 65; karṇaroga 57), Amara³⁰¹ (kuṣṭha 37), Amitaprabha³⁰² (jvara 65–68, 84, 90; krimi 4; pāṇḍuroga 9; ṛṣṇā 24; unmāda 50; udāvarta 14; udara 11; śoṭha 6; galagaṇḍa 2; vṛṇaśoṭha 75; upadaṇṣa 9; visarpa 32; mukharoga 87; vamaṇa 16; vireka 16 and 28), Amitaprabha's *Carakanyāsa* (anuvāsana 33), Amitaprabha's *Cikitsāśīlā*³⁰³ (arśas 147–151), *Amoghayogatāntra*³⁰⁴ (jvarātīśāra 1–2; unmāda 21–28), *Amṛtaghaṭa*³⁰⁵ (jvara 2), *Amṛtamālā*³⁰⁶ (krimi 12; ṛṣṇā 22; vātarakta 6, 10, 12, 13, 20, 25; udara 23; kuṣṭha 17 and 150),³⁰⁷ *Amṛtavallī*³⁰⁸ (arśas 18–22; hikkāśvāsa 1; pariṇāmaśūla 51–53 and 63–69; mūtrāghāta 13 and 15; śoṭha 52; vṛṇaśoṭha 53 and 55; amlapitta 1 and 21; masūrikā 3, 9, 11; kṣudraroga 43, 50, 81–82; vṛṣya 9), *Āśādhavarman*³⁰⁹ (vamaṇa 16; anuvāsana 33), *Āśvavāidyaka* (vātavyādhi 117–126),³¹⁰ *Āśvinīśambhitā* (kṣudraroga 66–71), *Atisvalpayogavyākhyā* of Mādhavakara³¹¹ (jvara 247–252), *Ātreya*³¹² (grahaṇī 16–19),³¹³ anuvāsana 33),³¹⁴ *Āyurvedaprakāśa*³¹⁵ (jvara 3), *Āyurvedasāra*³¹⁶ (jvara 82, 105, 127, 133, 142,³¹⁷ 161, 162–164, 170, 174, 175–177, 187, 277–278; atīśāra 23–25, 67, 76, 83–84; grahaṇī 9–11, 20–21, 39, 47–49; arśas 35–44, 83–92, 100–103; pāṇḍuroga 25; raktapitta 22–24, 39–42, 43, 66–73; rājayakṣman 3, 9–12, 13–15, 24–25, 35–39, 40–46, 61–63, 75; kāsa 29; hikkāśvāsa 2–5, 11–14, 24–29; chardi 21, 23, 24; apasmāra 11, 15, 23–28; vātavyādhi 16–17, 26, 36, 39–40, 42–43, 46, 47–49, 50, 52–55, 58, 59; āmavāta 15–18, 35–37, 72; śūla 3, 6, 7, 12, 25, 37, 44–45, 50–51; pariṇāmaśūla 1, 4, 16–19, 26–28; gulma 34–39, 40, 46, 47, 57–59, 71–72; hṛdroga 25; mūtrakṛcchra 11, 13, 26; mūtrāghāta 3 and 4; aśmarī 1, 13–16, 32, 33, 47–49; prameha 11, 22–26, 47–49; udara 31–38; plīhayakṛt 3, 30–32, 33–40; śoṭha 8, 12, 17, 35, 41–43, 44–47; vṛddhi 4–5, 12, 17, 22, 23, 26; galagaṇḍa 1, 6, 14–15, 17, 18, 23, 28, 30, 40, 47, 51, 57; ślīpāda 11, 12, 20–22; vidradhi 12 and 14; vṛṇaśoṭha 49, 60, 75; nāḍīvṛṇa 2 and 3; bhagandara 22; kuṣṭha 17, 46, 64, 67, 69, 70, 104–110, 111–115, 120–121, 134–135, 150, 156, 159; udarda 1, 2, 4, 5, 8, 13; amlapitta 1, 5, 6, 14, 54; visarpa 11 and 14; masūrikā 1, 39, 41, 42, 44; kṣudraroga 7, 10, 15, 18, 66–71, 81–82, 92, 96, 97, 122, 123, 124, 135–136; mukharoga 7, 9, 11, 14, 15, 16, 40, 53, 58cd, 63, 75–76, 91, 99–103, 107–108; karṇaroga 11–12, 17, 23–24, 28, 57; nāsāroga 21; vṛṣya 37; nirūha 22–25, 28–30, 31; nasya 11),³¹⁸ Bakula³¹⁹ (jvara 5, 28–29, 69, 117, 253–254; jvarātīśāra 26–27; atīśāra 77; grahaṇī 9–11, 16–19, 50–54; arśas 18–22, 33–34, 35–44, 51–62, 83–92, 100–103, 147–151, 159–164; agnimāndya 2, 11–12, 14–15, 30–39, 73–75, 78–79, 82, 86; krimi 5; pāṇḍuroga 4–6, 10, 27, 35–40; raktapitta 7, 39–42, 66–73, 82–96; rājayakṣman 13–15, 27, 40–46, 47–60, 87–90, 92–93, 94–95; kāsa 20 and 40–41; svarabheda

10 and 13; chardi 4–5 and 14; *trṣṇā* 4; *madātyaya* 17–19; *unmāda* 9–12, 15–16, 34–37; *apasmāra* 23–28; *vātavyādhi* 1, 2, 8–9, 24–25, 32–35, 45, 81–85, 87, 88–92, 140, 162–170, 189–198, 199–204; *vātarakta* 21–23, 33–34, 42–51, 52–58; *āmavāta* 61–65; *udāvarta* 4–5, 12, 32–33; *gulma* 46; *hṛdroga* 8, 10, 26–29; *mūtrakṛcchra* 27 and 28; *aśmarī* 2–4 and 7–9; *prameha* 12, 27–28, 30–37, 47–49; *sthaulya* 6–11 and 26–28; *udara* 31–38, 57, 59–62; *plīhayakṛt* 15–18; *galagaṇḍa* 5; *ślīpada* 23 and 24–30; *vidradhi* 3; *vraṇaśoṭha* 49, 75, 76–80, 91–92, 98, 99; *kuṣṭha* 156; *udarda* 2; *kṣudraroga* 92; *mukharoga* 32–33, 63, 111–112; *Bakulakara* (jvara 64 and 65–68; *raktapitta* 82–96; *vātavyādhi* 1), *Bakulamiśra* (karṇaroga 4), *Bakulatantara*³²⁰ (*nāḍīvrāṇa* 3), *Bakulavyākhyā* (jvara 20; *pāṇḍuroga* 35–40), *Bālasarasvatī*³²¹ (*agnimāndya* 11–12), *Bauddhāgama* (*unmāda* 21–28),³²² *Bhadraśaunaka* (*kuṣṭha* 74–82), *Bhadravarman*³²³ (jvara 188;³²⁴ *jvarātīsāra* 3–4; *arśas* 4–7; *agnimāndya* 86; *raktapitta* 12–13 and 20; *hikkāśvāsa* 6–8; *trṣṇā* 12; *vātavyādhi* 3–5; *āmavāta* 11–14; *udāvarta* 12; *aśmarī* 25; *prameha* 18 and 19;³²⁵ *vidradhi* 12; *bhagandara* 20–21 and 23; *upadaṁśa* 7 and 10; *kuṣṭha* 32; *visarpa* 22, 27, 30; *masūrikā* 33; *kṣudraroga* 81–82 and 86; *nāśāroga* 23; *vamana* 6),³²⁶ *Bhāluki* (jvara 18, 20, 149, 150, 153–156, 157–158, 237–238, 292; *aśmarī* 47–49; *netraroga* 19), *Bhānumatī* (*agnimāndya* 73–75; *raktapitta* 35–37; *trṣṇā* 2, 3, 7, 8; *vātavyādhi* 3–5, 8–9, 58; *udāvarta* 34; *hṛdroga* 5 and 10; *aśmarī* 2–4 and 7–9; *galagaṇḍa* 33; *vraṇaśoṭha* 1–2; *bhagna* 2, 5, 16–27; *kuṣṭha* 162; *visarpa* 6; *kṣudraroga* 24–25, 32, 84–85; *mukharoga* 1, 20, 23, 24, 25–26, 28–31, 32–33, 56, 99–103; *sneha* 11; *vireka* 28; *anuvāsana* 5, 19–22, 23; *nirūha* 8–10, 26–27, 32–33), *Bhānumatikāra* (*bhagna* 14–15), *Bhānumatīkṛt* (*arocaka* 2; *chardi* 3; *vātavyādhi* 3–5; *vraṇaśoṭha* 99; *mukharoga* 68), *Bhāṣya* (*arśas* 76–82),³²⁷ *Bhaṭṭāra(ka)*³²⁸ (jvara 3, 5, 14–15, 19, 20, 21, 22, 23, 49, 65–68, 203–205, 219–225, 235, 291; *arśas* 159–164; *agnimāndya* 11–12; *rājayakṣman* 24–25; *gulma* 63–67 and 91; *udara* 51; *plīhayakṛt* 19–23; *sveda* 1, 3, 16–17; *anuvāsana* 38–39), *Bhaṭṭāraharicandra* (jvara 3 and 10–11; *vireka* 2), *bhaṭṭāraharicandrānuyāyinaḥ* (*agnimāndya* 11–12), *Bhaṭṭāraharicandra's Svasaṁhitā* (*sneha* 6), *Bhavadeva*³²⁹ (*vātavyādhi* 227–271),³³⁰ *Bhavadevīya Gandhaśāstra* (*vātavyādhi* 227–271),³³¹ *Bhavya*³³² (*arśas* 35–44; *kāsa* 20; *hṛdroga* 10; *udara* 57; *kuṣṭha* 156), *Bhavya's Vaidyapradīpa* (*atīsāra* 30), *Bhavyadatta* (jvara 3 and 5; *arśas* 33–34; *vā:avyādhi* 205–226; *prameha* 30–37; *ślīpada* 24–30; *mukharoga* 1, 20, 67; *karṇaroga* 23–24), *Bhavyadattasaṅgraha Vaidyapradīpa* (*netraroga* 19), *Bhavyadatta's Vaidyapradīpasāṅgraha* (jvara 3), *Bhavyadatta's Vaidyapradīpa* (jvara 3, 41–42, 165–166; *kāsa* 1–3; *mukharoga* 32–33 and 65; *karṇaroga* 16), *Bhavyadatta's Yogaratnākara* (jvara 31–32), *Bheḍa* (jvara 5, 55, 64, 79, 85, 117, 124, 128, 145–146, 182–183, 196–197, 281; *atīsāra* 39–45, 61–62, 69, 85–87, 100; *arśas* 4–7 and 35–44; *agnimāndya* 84 and 89; *krimi* 10 and 12; *rājayakṣman* 65–66; *hikkāśvāsa* 1; *arocaka* 5–7; *chardi* 6–11 and 21; *madātyaya* 3–6 and 20; *unmāda* 5, 13–14, 34–37; *apasmāra* 17–22; *vātavyādhi* 16–17, 31, 47–49, 95, 180–184; *vātarakta* 1–3; *ūrustambha* 9; *hṛdroga* 1; *mūtrakṛcchra* 11; *prameha* 18, 22–26, 30–37; *udara* 39; *vraṇaśoṭha* 75 and 81–83; *upadaṁśa* 8; *sneha* 1 and 33; *vamana* 9, 10, 11, 20–21; *vireka* 29–30; *anuvāsana* 35; *nasya* 22–23), *Bhīṣanīmūṣṭi*³³³ (*arśas* 4–7;³³⁴ *unmāda* 51;³³⁵ *śoṭha* 36), *Bhoja* (jvara 188; *atīsāra* 21–22; *arśas* 142–146 and 147–151; *kāsa* 46–47; *chardi* 1; *aśmarī* 50–53; *galagaṇḍa* 32; *sneha* 11; *nirūha* 20–21), *Bindusāra*³³⁶ (jvara 141,

199–200, 231, 232–233; jvarātisāra 1–2,³³⁷ 3–4, 16–25; krimi 12; raktapitta 25 and 35–37; kāsa 10–15 and 39; hikkāśvāsa 6–8; arocaka 5–7 and 13; chardi 1; unmāda 51; apasmāra 29; vātavyādhi 42–43 and 56–57; ūrustambha 5; hṛdroga 6–7; mūtrakṛcchra 17 and 29–36;³³⁸ aśmarī 30–31; udara 43; galagaṇḍa 2, 8, 25; vidradhi 2 and 7; vṛṇaśoṭha 52; bhagandara 10; kuṣṭha 23 and 25;³³⁹ mukharoga 72; kaṇṇaroga 2 and 32; nāsāroga 9–10; netraroga 8 and 27; vṛṣya 8, 50–51, 54),³⁴⁰ *Bodhicaryāvatāra* (unmāda 17),³⁴¹ *Bṛhattantrapradīpa*³⁴² (pariṇāmaśūla 57–62 and 63–69; mukharoga 1 and 9), Cakra (jvara 5, 6, 10–11, 14–15, 17, 19, 20, 28–29, 47, 49, 65–68, 84, 100–102, 103, 117, 124, 133, 149, 150, 162–164, 165–166, 188, 213, 235, 253–254, 255, 256–257, 277–278, 291; jvarātisāra 16–25; atisāra 1–3, 21–22, 30, 54–56, 60, 73–75, 77; grahaṇī 9–11, 16–19, 50–54; arśas 33–34, 100–103, 111–114, 133–141, 142–146, 147–151, 159–164, 165–171; agnimāndya 14–15, 18–22, 73–75; krimi 5; pāṇḍuroga 4–6, 25, 27; raktapitta 7, 30–33, 39–42, 66–73, 82–96; rājayakṣman 13–15, 24–25, 40–46, 47–60, 83–86, 87–90; kāsa 16–19, 30–31, 37–38, 40–41, 43, 59–64; hikkāśvāsa intr., 17, 19–20, 24–29, 30–33; svarabheda 13; chardi 1 and 28; tṛṣṇā 4; madātyaya 11–12; unmāda 1–2, 5, 9–12, 15–16, 21–28, 29–30, 31–33, 34–37, 39–43; apasmāra 2, 7–8, 17–22, 23–28, 31–32; vātavyādhi 3–5, 6, 13–15, 45, 47–49, 65–68, 77, 81–85, 87, 88–92, 106–116, 136–137, 140, 150–154, 162–170, 175–179, 189–198, 199–204, 205–226, 227–271; vātarakta 1–3, 13, 21–23, 40, 41, 42–51, 52–58; ūrustambha 8 and 12; āmavāta 9, 35–37, 61–65; śūla 50–51, 63, 65–67; udāvarta 25, 26–27, 29–30, 35; gulma 9–10, 57–59, 62, 71–72; hṛdroga 8, 23–24, 26–29; mūtrāghāta 1; aśmarī 2–4, 7–9, 10; prameha 27–28 and 30–37; sthauḷa 1, 5, 26–28; udara 1, 11, 16, 18, 31–38, 55–56, 57, 58, 59–62, 64; plīhayakṛt 15–18 and 19–23; śoṭha 6, 8, 14, 24–28, 44–47, 48–51; galagaṇḍa 5, 25, 33, 49; ślīpada 24–30 and 31; vṛṇaśoṭha 48, 65–66, 68, 75, 76–80, 91–92, 98, 99; nāḍivṛṇa 3 and 17–18; upadaṃśa 4; bhagna 1, 3, 4, 11, 16–27; kuṣṭha 2, 8–12, 24, 50–51, 71–72, 111–115, 134–135, 150; amlapitta 1 and 23–24; visarpa 3–4, 15, 16, 18, 36–40; kṣudraroga 1, 3, 10, 21–22, 23, 31, 84–85, 92, 98, 126–133; mukharoga 1, 25–26, 32–33, 37, 41, 44, 45, 52, 57, 60, 63, 67, 70, 73–74, 82, 84, 111–112, 113–117; kaṇṇaroga 18–22, 23–24, 30, 61; rasāyana 190–195; vṛṣya 15–25, 26–36, 37, 38–44; sneha 1, 21–22, 28; sveda 16–17; vamaṇa 9 and 16; vireka 8–9, 17, 26; anuvāsaṇa 1–2, 7–10, 19–22, 23, 24–25, 33, 38–39; nirūha 14 and 26–27; nasya 6), Cakra's *Dīpikā* (kaṇṇaroga 23–24), Cakra's *Svasaṃgraha* (grahaṇī 77–85), Cakra's *Vyagradaridraśubhankara* (vṛṇaśoṭha 46; upadaṃśa 10), Cakra's *Yogasamgraha*³⁴³ (vṛddhi 22), Cakradatta (jvara 20, 64, 65–68, 90; vṛṇaśoṭha 48), *Cakradattavyākhyā* (jvara 20), Cakrapāṇi (jvara 199–200, 247–252, 277–278), Cakrapāṇidatta (introductory prose; prameha 18), *Cakrasamgraha* (introductory verses; vṛṇaśoṭha 48; visarpa 30), cakraśiṣyāḥ (agnimāndya 2;³⁴⁴ pāṇḍuroga 35–40; vātavyādhi 106–116),³⁴⁵ *Cakraṭīpanī*³⁴⁶ (pāṇḍuroga 35–40),³⁴⁷ *Cakravyākhyā* (jvara 20),³⁴⁸ Cakṣuṣyeṇa (jvara 135–136; svarabheda 13; vātavyādhi 81–85; vātarakta 13; galagaṇḍa 3–4, 31, 32, 35; visarpa 9 and 33; mukharoga 1, 9, 75–76, 88, 97–98, 111–112; nāsāroga 2–3; sneha 1 and 6; sveda 1, 10, 11), Candana (amlapitta 23–24; vireka 8–9),³⁴⁹ Candanabhoḍa³⁵⁰ (vṛṇaśoṭha 75³⁵¹ and 76–80),³⁵² *Caṇḍikā*³⁵³ (unmāda 21–28),³⁵⁴ *Candrakalā*³⁵⁵ (agnimāndya 14–15),³⁵⁶ *Candrakalātīkā* (atisāra 64;³⁵⁷ vṛṇaśoṭha 75),³⁵⁸ Candraṭa³⁵⁹

(jvara 2, 64, 71, 75, 103, 116, 117, 127, 178–179, 182–183, 211, 253–254, 282; jvarātisāra 1–2 and 16–25; atisāra 1–3; grahaṇī 29–36, 55–59, 77–85; arśas 120–126; agnimāndya 90–91; raktapitta 17, 28–29, 35–37, 39–42, 79–81; kāsa 24–26, 30–31, 37–38, 59–64; svarabheda 13; arocaka 2 and 3–4; chardi 14; tṛṣṇā 22; madātaya 20; 34–37; vātavyādhi 16–17; āmavāta 15–18 and 39–43; śūla 12, 50–51, 54, 59–60; udāvarta 7; hṛdroga 25; prameha 18, 22–26, 30–37, 38–39; śoṭha 24–28; galagaṇḍa 31; vidradhi 8 and 19; vṛṇaśoṭha 49 and 76–80; nāḍīvraṇa 6; bhagandara 13–27; upadāṇṣa 4, 5, 10, 11, 15; bhagna 12–13; kuṣṭha 17, 25, 29, 30, 32, 34, 35, 41, 74–82, 131–133, 134–135, 150; visarpa 14, 30, 31; kṣudraroga 66–71 and 72–75; mukharoga 9 and 111–112; kaṇṇaroga 1, 8–9, 11–12, 30, 35; nāsāroga 29–31; netraroga 20; rasāyana 160; vṛṣya 15–25 and 50–51; sneha 30; nirūha 22–25, 26–27, 28–30; nasya 18), *Candraṭasaṃgraha* (mūrchā 1–2; unmāda 21–28; vṛddhi 22; visarpa 22; anuvāsana 35; nasya 22–23), *Candrikā* (jvara 46, 247–252, 256–257; atisāra 1–3; arśas 142–146; agnimāndya 73–75; pāṇḍuroga 2; rājyākṣman 1–2 and 35–39; hikkāśvāsa 2–5; tṛṣṇā 2 and 7; vātavyādhi 6, 8–9, 96–105; āmavāta 35–37; gulma 98; hṛdroga 5; āsmarī 2–4, 7–9, 10, 13–16, 17–19, 34, 50–53; prameha 2–3 and 16; vṛddhi 10; galagaṇḍa 16, 26, 32, 41, 42, 44, 53–56, 61; ślīpāda 10; vidradhi 1 and 17–18; vṛṇaśoṭha 1–2 and 55; nāḍīvraṇa 2, 6, 16; śūkadoṣa 3, 6, 7, 8, 9; bhagna 2, 4, 5, 14–15, 16–27; kuṣṭha 71–72, 159, 162; visarpa 6, 8, 15; mukharoga 1, 4, 20, 22, 23, 24, 25–26, 32–33, 34, 37, 41, 43, 44, 46–47, 50, 56, 58ab, 58cd, 59, 60, 61, 63, 69, 77, 84; kaṇṇaroga 1, 3, 4, 32, 49; nāsāroga 12, 13, 15; netraroga 16, 20, 26; sveda 16–17; vamaṇa 16; vireka 28), *Candrikākāra* (jvara 3 and 150; āsmarī 13–16; prameha 4; vṛddhi 6; vṛṇaśoṭha 99; visarpa 6; kaṇṇaroga 11–12), *Candrikākṛt* (jvara 65–68 and 253–254; vātavyādhi 3–5 and 81–85; vṛddhi 6; galagaṇḍa 40, 48, 51; vidradhi 8; kṣudraroga 32; mukharoga 45 and 68; kaṇṇaroga 32 and 43), *Candrikāmata* (arśas 147–151; kṣudraroga 32), *candrikāmātānuvādinah* (galagaṇḍa 33), *Candrikāsaṃgraha* (bhagna 2), *Candrikāvya-khyā* (bhagna 16–27), *Caraka* (passim),³⁶⁰ *Carakapariśiṣṭakāra*³⁶¹ (jvara 150; sneha 6; nirūha 3), *Carakapariśiṣṭakṛt* (sveda 16–17), *Carakavākyapraṭisaṃskāra* (udara 11), *Carakottaratantra* (jvara 57; nāḍīvraṇa 2, 3, 16; bhagandara 1 and 4; śūkadoṣa 2, 3, 8, 9; bhagna 1; kṣudraroga 1, 2, 4, 7, 9, 10, 11, 14, 16, 17, 18, 21–22, 24–25, 26, 32, 33, 34, 35–37, 84–85, 96; mukharoga 9 and 32–33),³⁶² *Caturadevīya Gandhaśāstra*,³⁶³ (mukharoga 109–110),³⁶⁴ *Cikitsākalikā*³⁶⁵ (jvara 3; vātavyādhi 147–149; udara 59–62; vṛddhi 2; netraroga 1; sveda 16–17), *Cikitsāśāstra*³⁶⁶ (vātarakta 7), *Cikitsāti-śaya* (arśas 147–151; chardi 23),³⁶⁷ *dākṣiṇātyāḥ* (vātavyādhi 96–105),³⁶⁸ *anuvāsana* 33),³⁶⁹ *Daṇḍin* (jvara 1),³⁷⁰ *Dāruvāha*³⁷¹ (jvara 63), *Dāsarasāyana*³⁷² (kuṣṭha 17), *Dattaka*³⁷³ (vātavyādhi 227–271),³⁷⁴ *Deśāṅga*³⁷⁵ (mūtrakṛcchra 28),³⁷⁶ *Dharaṇīdhara* (rājyākṣman 87–90; udara 26; kṣudraroga 66–71),³⁷⁷ *Dharmakīrti* (unmāda 17),³⁷⁸ *Dīpikā*³⁷⁹ (jvara 244–246, 247–252, 270; pāṇḍuroga 9 and 35–40; unmāda 34–37; gulma 9–10; udara 19; kuṣṭha 111–115; sneha 7, 11, 21–22; vireka 28), *Dīpikākāra*³⁸⁰ (jvara 4; gulma 34–39), *Dīpikākṛt* (jvara 3 and 47; raktapitta 51; rājyākṣman 9–12; kāsa 10–15; hikkāśvāsa 1; chardi 1; vātavyādhi 2; āsmarī 35–36; prameha 27–28; udara 31–38; śoṭha 24–28), *Dravyāvalī*³⁸¹ (grahaṇī 47–49; rājyākṣman 87–90; chardi 21; vātavyādhi 185–188 and 227–271; pariṇāmasūla 57–62; śoṭha 8; kuṣṭha 159; kṣudraroga 92; mukharoga 77 and 99–103 and 113–117), *Drḍhabala* (jvara 20, 31–32,

41–42, 65–68, 247–252; arśas 93–95; rājayakṣman 65–66; ṛṣṇā 1, 9, 10–11; gulma 20–23; mūtrāghāta 1; udara 18; sneha 6, 21–22, 23, 30; vamaṇa 9, 12, 13, 14, 20–21; vireka 2, 8–9, 10–15, 17, 20–21, 26, 27, 28, 29–30; anuvāsana 1–2, 11–12, 13, 14–18, 19–22, 24–25, 32, 33, 35, 36–37, 40–41; nirūha 1. 4–6, 8–10, 11, 12, 13, 17, 20–21, 26–27, 32–33, 35; nasya 1, 2, 11, 12, 13–16), *Dr̥dhabalasamskāra* (raktapitta 6; nirūha 18–19), *Dvādaśasahasravāgbhaṭṭa*³⁸² (mukharoga 24), *Ekārṇavanighaṇṭu*³⁸³ (jvara 65–68), Gadādhara (jvara 64, 178–179, 256–257; arśas 147–151; agnimāndya 77 and 82; pāṇḍuroga 27; hikkāśvāsa 19–20; charḍi 15–16; vātavyādhī 1, 10–12, 205–226; āsmarī 11–12; vraṇaśoṭha 99; kṣudraroga 92; mukharoga 57; karṇaroga 16; nāśaroga 7–8), *Gadaviniścaya*³⁸⁴ (vraṇaśoṭha 48), *Gandhaśāstra*³⁸⁵ (vātavyādhī 227–271 and 276–278; mukharoga 73–74 and 109–110),³⁸⁶ *Gandhaśāstranighaṇṭu*³⁸⁷ (vātavyādhī 199–204 and 227–271), *Gandhatantra* (vātavyādhī 227–271),³⁸⁸ *Gandhatantraśāstra* (vātavyādhī 227–271),³⁸⁹ gāndhikāḥ (vātavyādhī 93–94), gaudāḥ (jvara 124;³⁹⁰ kṣudraroga 43; karṇaroga 18–22;³⁹¹ nirūha 26–27),³⁹² *Gauḍapāṭha* (kuṣṭha 8–12),³⁹³ *Gauḍavyākhyā* (karṇaroga 23–24), Gayadāsa (vātavyādhī 87, 205–226, 276cd–278; vātarakta 40; gulma 40 and 46), Gopati,³⁹⁴ *Gopurakṣita*³⁹⁵ (jvara 64), Govardhana³⁹⁶ (jvara 20 and 64; arśas 111–114 and 142–146; agnimāndya 73–75; rājayakṣman 40–46; kāsa 59–64; madātaya 11–12; unmāda 21–28 and 29–30; gulma 9–10; udara 57),³⁹⁷ Govardhana's *Arthamālā* (jvara 64),³⁹⁸ Govardhana's *Br̥hattantrapradīpaṅkā* (jvara 232–233; jvarātīsāra 16–25), Govardhana's *Karmamālā*³⁹⁹ (arśas 133–141), Govardhana's *Kaumudī* (śoṭha 48–51), Govardhana's *Nyāyasārāvalī* (arśas 147–151; rājayakṣman 9–12 and 13–15), Govardhana's *Paribhāṣāvalī*⁴⁰⁰ (raktapitta 14), Guṇākara (atīsāra 1–3; pariṇāmaśūla 24), guru(pādāḥ) (jvarātīsāra 1–2; arśas 107–110; pāṇḍuroga 2; raktapitta 6; rājayakṣman 65–66; svarabhedha 6; vātavyādhī 24–25 and 47–49; vraṇaśoṭha 46; upadāṃsa 3; kuṣṭha 116–119, 156, 159; visarpa 15; mukharoga 32–33; karṇaroga 4; netraroga 36; anuvāsana 24–25), *Gurudattasamgraha* (vraṇaśoṭha 69),⁴⁰¹ *Gurugrantha*⁴⁰² (gulma 40; hṛdroga 5; mūtrāghāta 4 and 5; āsmarī 7–9),⁴⁰³ guruparamparā (arśas 165–171),⁴⁰⁴ *Guruparamparāvyākhyā* (grahaṇī 29–36),⁴⁰⁵ gurusampradāya (śūla 3 and 63; pariṇāmaśūla 36–41 and 75–76),⁴⁰⁶ *Haramekhalā* (jvara 282; agnimāndya 3 and 11–12; śūla 56; kṣudraroga 52, 76–79, 81–82, 88, 98, 99, 121; mukharoga 96; vṛṣya 54 and 56),⁴⁰⁷ *Haramekhalānighaṇṭu*⁴⁰⁸ (vṛṣya 54), *Hārāvalī*⁴⁰⁹ (apasmāra 23–28;⁴¹⁰ vṛṣya 26–36),⁴¹¹ Haricandra⁴¹² (jvara 64; sneha 16), Hārīta (jvara 4, 5, 8–9, 10–11, 33, 71, 75, 80, 86, 92–98, 117, 118, 123, 127, 149, 150, 151, 160, 161, 178–179, 185–186, 187, 188, 206, 210, 217, 218, 261, 292; jvarātīsāra 16–25; atīsāra 17–18 and 57–59; grahaṇī 47–49; arśas 8–10; pāṇḍuroga 44–47 and 51; raktapitta 39–42 and 66–73; rājayakṣman 9–12 and 47–60; hikkāśvāsa 2–5 and 21–23; chardi 22; ṛṣṇā 2; unmāda 21–28 and 34–37; vātavyādhī 127–131 and 180–184; āmavāta 35–37; śūla 3, 10, 12, 20, 25, 27, 33; udāvarta 7, 26–27, 28; gulma 1–3, 15, 17, 18–19, 43–44; prameha 22–26 and 30–37; udara 46 and 55–56; śoṭha 6; kuṣṭha 54, 55, 68; visarpa 18 and 33; masūrikā 1, 4, 17, 18–20, 23, 27, 35, 37; kṣudraroga 125; rasāyana 160, 161–162, 166, 190–195; vṛṣya 1; anuvāsana 7–10; nirūha 26–27), hārītīyāḥ (jvara 18), *Indumatī*⁴¹³ (jvara 3; pāṇḍuroga 19–20 and 35–40; rājayakṣman 40–46; kāsa 10–15; arocaka 1; vātavyādhī 136–137; śoṭha 48–51; vraṇaśoṭha 99; kuṣṭha 116–119 and 120–121; kṣudraroga 31, 32, 43), Īśāna⁴¹⁴

(jvara 19, 20, 65–68, 247–252; atisāra 104; rājayaḥṣman 24–25 and 40–46; madātyaya 11–12; unmāda 21–28, 29–30, 39–43; apasmāra 7–8; vātavyādhi 87 and 199–204; vātarakta 40; udara 11 and 57; vṛṇaśoṭha 99; kṣudraroga 126–133; sneha 21–22; vamaṇa 14; vireka 8–9 and 26; anuvāsana 7–10, 24–25, 33; nirūha 11, 13, 14, 35; nasya 6), Īśānadeva⁴¹⁵ (jvara 20; atisāra 1–3; vamaṇa 16), Īśānasena⁴¹⁶ (unmāda 29–30), Īśvarasena⁴¹⁷ (jvara 5 and 64), Jātūkarna (jvara 4, 5, 64, 124, 149, 178–179, 196–197, 219–225, 244–246, 272–274; atisāra 60 and 104; grahaṇī 47–49; arśas 115–117, 118–119, 127–131; rājayaḥṣman 9–12 and 40–46; kāsa 10–15; ṛṣṇā 10–11; unmāda 34–37; apasmāra 9–10, 17–22, 31–32; vātavyādhi 140, 171–174, 175–179; vātarakta 40; ūrustambha 13; āmavāta 35–37; udāvarta 29–30 and 35; gulma 9–10, 20–23, 71–72; prameha 27–28; udara 14–15, 16, 21–22, 57, 58; śoṭha 8, 15–16, 24–28, 33–34, 35, 48–51; vṛṇaśoṭha 98 and 99; kuṣṭha 104–110 and 111–115; visarpa 19 and 22; masūrīkā 21–22, 36, 37, 38; kṣudraroga 125; mukharoga 73–74 and 113–117; karṇaroga 23–24; netraroga 15 and 19; vireka 10–15; anuvāsana 1–2 and 33), Jejjata (jvara 4, 5, 14–15, 18, 19, 20, 47, 49, 64, 65–68, 124, 133, 149, 150, 188, 203–205, 219–225, 235, 237–238, 247–252, 253–254, 255, 256–257, 284, 291; atisāra 1–3, 93–94, 104; grahaṇī 20–21, 22, 23–27, 47–49; arśas 111–114 and 133–141; agnimāndya 30–39, 73–75, 82, 90–91; pāṇḍuroga 35–40; raktapitta 8–11, 17, 22–24, 30–33; rājayaḥṣman 9–12, 13–15, 24–25, 35–39, 40–46, 47–60, 83–86; kāsa 1–3, 8, 16–19, 50–53, 59–64; hikkāśvāsa, intr., 2–5, 17, 19–20; chardi 1, 4–5, 6–11, 12, 15–16, 21; ṛṣṇā 3 and 10–11; madātyaya 11–12 and 28; unmāda 15–16, 21–28, 29–30, 34–37, 39–43; apasmāra 2, 7–8, 9–10, 17–22, 31–32; vātavyādhi 2, 3–5, 10–12, 13–15, 138–139, 140, 175–179; vātarakta 40; udāvarta 26–27, 29–30, 34, 35; gulma 9–10, 17, 57–59, 62; hr̥droga 5, 23–24, 25; āsmarī 2–4, 13–16, 35–36; prameha 27–28; udara 3–4, 6–10, 11, 14–15, 16, 18, 19, 27–30, 31–38, 57, 64; plīhayakṛt 9 and 19–23; śoṭha 8, 14, 15–16, 24–28, 29, 33–34, 38–39, 48–51; galagaṇḍa 49; vṛṇaśoṭha 99; nāḍīvṛṇa 2, 6, 16; kuṣṭha 111–115 and 148; visarpa 2, 3–4, 17, 18; kṣudraroga 1 and 32; mukharoga 32–33, 59, 73–74; karṇaroga 16, 18–22, 23–24, 30; nāsāroga 7–8; netraroga 16; vṛṣya 1; sneha 21–22; vamaṇa 9 and 14; vireka 17 and 26; anuvāsana 7–10; nirūha 14 and 26–27; nasya 6), jejjatamatānuyāyin(aḥ) (grahaṇī 47–49 and 50–54; arśas 127–131; vireka 28), Jinadāsa⁴¹⁸ (jvara 5; rājayaḥṣman 40–46; śoṭha 48–51; vṛṇaśoṭha 99; mukharoga 11), Jinadāsa's *Karmadānī* (jvara 20 and 124), Jīvanātha's *Lauhaśāstra*⁴¹⁹ (raktapitta 82–96),⁴²⁰ Jñānaśrī⁴²¹ (śūla 12; śoṭha 54; nāsāroga 9–10), Kalahadāsa⁴²² (jvara 65–68),⁴²³ Kālapāda⁴²⁴ (rasāyana 167–189),⁴²⁵ Kālidāsa⁴²⁶ (mukharoga 113–117), *Kalyāṇasiddhi* (grahaṇī 29–36; arśas 120–126; rājayaḥṣman 9–12, 24–25, 47–60; vireka 10–15),⁴²⁷ Kāmarūpa⁴²⁸ (vātarakta 4),⁴²⁹ Kāmarūpīyāḥ (kṣudraroga 43),⁴³⁰ *Kāmaśāstra* (madātyaya 17–19),⁴³¹ Kārikāyana (āmavāta 35–37), Kapila (agnimāndya 9–10), Kapilabala (jvara 64 and 77; sneha 6), Karavīra (kuṣṭha 71–72), *Karmamālā*⁴³² (agnimāndya 14–15; raktapitta 66–73; svarabheda 6; chardi 27; śūla 50–51; gulma 40; prameha 17; kuṣṭha 29 and 159; mukharoga 77),⁴³³ *Karmamālāṭīkā* (atisāra 64),⁴³⁴ Kārtika (jvara 54, 253–254, 256–257; udāvarta 34; gulma 40; āsmarī 13–16; galagaṇḍa 40 and 51; nāḍīvṛṇa 2 and 17–18; bhagandara 5; upadaṃśa 4; śūkadoṣa 2, 3, 8, 9; bhagna 2, 5, 14–15, 16–27; visarpa 15; kṣudraroga 18 and 84–85; mukharoga 25–26, 32–33, 57; sveda 16–17; vamaṇa 16; vireka 8–9 and

28; nirūha 4–6), Kārttikakuṇḍa (jvara 20, 46, 54, 64; vātavyādhi 81–85; plīhayakṛt 5 and 9), kāśmīrāḥ (jvara 256–257; arśas 49–50; raktapitta 66–73; gulma 41–42; udara 14–15 and 57; kuṣṭha 6–7 and 8–12; nasya 1), Kāśyapa (sneha 6), Kātoka⁴³⁵ (nāḍivraṇa 6 and 16; visarpa 6; masūrīkā 27; kṣudraroga 1; netraroga 16),⁴³⁶ Kauśika (jvara 292), Kharanāda (jvara 20 and 261; bhagandara 2), Kṛṣṇātreyā (jvara 64 and 247–252; atisāra 80–82; arśas 49–50; rājayakṣman 40–46; chardi 15–16; unmāda 31–33; vātavyādhi 64, 199–204, 227–271; udara 59–62; plīhayakṛt 33–40; vraṇasoṭha 76–80; kṣudraroga 91; nasya 11), Kṣārapāṇi (jvara 20, 65–68, 193, 203–205; agnimāndya 77; rājayakṣman 65–66; kāsa 10–15 and 27; hikkāśvāsa 19–20 and 30–33; vātavyādhi 3–5, 10–12, 199–204; gulma 45; udara 3–4,⁴³⁷ 11, 23; plīhayakṛt 30–32; śoṭha 1 and 6; vraṇasoṭha 90 and 91–92; kuṣṭha 25; sneha 13–14), *Lauhapattra*⁴³⁸ (pāṇḍuroga 11), *Lauhaśāstra* (arśas 76–82;⁴³⁹ masūrīkā 9),⁴⁴⁰ *lauhaśāstrajñāḥ* (pariṇāmaśūla 21–22), *Lohaśāstra*⁴⁴¹ (śūla 57;⁴⁴² mukharoga 73–74),⁴⁴³ *lohaśāstravidāḥ* (śūla 63), *Lokanātha* (arśas 107–110),⁴⁴⁴ *lokavyavahāra* (vr̥ṣya 56),⁴⁴⁵ *Lokoka*⁴⁴⁶ (vātavyādhi 272–276ab),⁴⁴⁷ *Mādhava* (arśas 127–131; kāsa 59–64; unmāda 29–30; apasmāra 7–8; vātavyādhi 1; gulma 9–10; udara 27–30 and 57; śoṭha 15–16 and 48–51; vraṇasoṭha 48; masūrīkā 39), *Mādhava's Prāśnashasraavidhāna* (vātavyādhi 1), *Mādhava's Suśrutavārtika* (vātavyādhi 3–5), *Mādhava's Yogavyākhyā* (jvara 124;⁴⁴⁸ arśas 127–131⁴⁴⁹ and 133–141), *Mādhavagrantha* (vraṇasoṭha 48), *Mādhavakara* (jvara 284; rājayakṣman 40–46; kāsa 59–64; gulma 17; vraṇasoṭha 68), *Mādhavakāra* (karṇaroga 23–24), *Mādhavakara's Dravyaguṇa*⁴⁵⁰ (jvara 31–32;⁴⁵¹ agnimāndya 5),⁴⁵² *Mādhavakara's Prāśnashasraavidhāna* (jvara 41–42), *Mādhava(kara)'s Svalpa-yogavyākhyā*⁴⁵³ (raktapitta 14; udara 27–30), *Mādhava(kara)'s Yogavyākhyā* (arśas 111–114; unmāda 34–37), *Mādhavasamgraha*⁴⁵⁴ (hikkāśvāsa 30–33),⁴⁵⁵ *Madhyasamhitā* of Vāgbhata(gupta) (jvara 235, 237–238, 247–252, 288–290, 291; atisāra 104; arśas 96–99, 120–126, 159–164; agnimāndya 77; madātyaya 21–22), *Madhyavāgbhata(samhitā)* (jvara 3; atisāra 4–5; grahaṇī 5–6 and 9–11; arśas 1–3; agnimāndya 1, 2, 6–8, 28; krimi 12; pāṇḍuroga 22–23; rājayakṣman 47–60; kāsa, intr.; hikkāśvāsa, intr.; madātyaya 21–22; unmāda 29–30; mukharoga 1, 32–33, 41, 43, 45, 50, 58cd, 59, 60, 61, 63, 70; karṇaroga 3, 11–12, 23–24, 50, 56, 57, 63–65; netraroga 6; anuvāsana 33), *Mahāmantrānusāraṇīya*⁴⁵⁶ (jvara 235),⁴⁵⁷ *Mahīdhara's Viśvavallabhā*⁴⁵⁸ (vr̥ddhi 22), *maitreyāḥ*⁴⁵⁹ (anuvāsana 33), *Mālā*⁴⁶⁰ (vireka 28),⁴⁶¹ *Manu* (jvara 65–68), *Mārkaṇḍeyapurāṇa*⁴⁶² (rājayakṣman 47–60),⁴⁶³ *Maudgalyāyāṇīya*⁴⁶⁴ (madātyaya 11–12; gulma 63–67; mukharoga 73–74),⁴⁶⁵ *Nāgabhartṭantra*⁴⁶⁶ (grahaṇī 16–19; svarabhedha 6; vraṇasoṭha 98 and 99; nāḍivraṇa 16; śūkadoṣa 9; kuṣṭha 1, 2, 25, 28, 88–90, 131–133, 144–147, 149; mukharoga 9), *Nāgadeva*⁴⁶⁷ (mukharoga 32–33), *Nāgārjuna* (jvara 64; atisāra 54–56; grahaṇī 37–38, 86–92, 93–99; arśas 66–75; agnimāndya 29; rājayakṣman 27; madātyaya 20; vātavyādhi 227–271; āmavāta 2, 4, 9; pariṇāmaśūla 77–78),⁴⁶⁸ *Nāgārjuna's Vārtāmālā*⁴⁶⁹ (agnimāndya 14–15; chardi 19), *Nāgārjuna's Yogamañjarī* (śūla 54), *Nāgārjunīya* (raktapitta 26;⁴⁷⁰ śūla 50–51), *Nāgārjunīyā Ārogyamañjarī*⁴⁷¹ (agnimāndya 72), *Nāgārjunīya Mahendrakalpa*⁴⁷² (arśas 4–7), *Nalanṛpati's Sūdaśāstra*⁴⁷³ (grahaṇī 60–61;⁴⁷⁴ agnimāndya 4), *Nānābhīdhāna* (mūtrakṛcchra 11), *Nānārtha*⁴⁷⁵ (sthaulya 31;⁴⁷⁶ plīhayakṛt 33–40),⁴⁷⁷ *Naradatta*⁴⁷⁸ (atisāra 104;⁴⁷⁹ ślīpada 24–30),⁴⁸⁰ *naradattasampradāyinaḥ*⁴⁸¹ (ślīpada

24–30), *Naradattiśiṣyatiṭṭippanī* (vraṇaśoṭha 88–89),⁴⁸² Naradeva⁴⁸³ (kṣudraroga 92), *Nāvanīta* (raktapitta 79–81; kāsa 48–49; kuṣṭha 97–100),⁴⁸⁴ *Nāvanītakā*⁴⁸⁵ (arśas 120–126; vātavyādhi 180–184; kuṣṭha 104–110),⁴⁸⁶ *Nāvanītakasaṃhitā* (nāsāroga 29–31), *Nāvanītantra* (svarabheda 12), *Nighaṇṭu*⁴⁸⁷ (grahaṇī 47–49; arśas 142–146; śoṭha 8),⁴⁸⁸ Nimi (karṇaroga 32), *Nyāyaśārada*⁴⁸⁹ (gulma 57–59), *paitāmahaḥ*⁴⁹⁰ (anuvāsana 33),⁴⁹¹ *Pālākāpya*⁴⁹² (jvara 3⁴⁹³ and 65–68),⁴⁹⁴ *Pāṇini* (śūla 12), *Parāśara* (atīśāra 101; rājayakṣman 67–71; nirūha 4–6 and 8–10), *Pātāñjalalohaśāstra*⁴⁹⁵ (arśas 180), *Pauṣkalāvata* (jvara 188), *Pīngala* (śūla 12),⁴⁹⁶ *Pratītyeṣṭha* (anuvāsana 33),⁴⁹⁷ *prābhākaraḥ*⁴⁹⁸ (raktapitta 82–96),⁴⁹⁹ *Prthvisīmha* (vātavyādhi 227–271),⁵⁰⁰ *Puṣkalāvata* (jvara 48 and 64), *Putrotsavāloka*⁵⁰¹ (rājayakṣman 27 and 30–34),⁵⁰² *rādhīyāḥ*⁵⁰³ (jvara 253–254),⁵⁰⁴ *agnimāndya* 9–10),⁵⁰⁵ *Rādhīya*⁵⁰⁶ (masūrikā 5),⁵⁰⁷ *Rakṣitāguru*⁵⁰⁸ (mukharoga 73–74), *Rakṣita*(pādāḥ)⁵⁰⁹ (jvara 20 and 64; atīśāra 54–56; grahaṇī 4 and 13; arśas 100–103 and 133–141; krimi 5; pāṇḍuroga 35–40),⁵¹⁰ *nāḍīvraṇa* 5), *Rāmadeva*⁵¹¹ (nāḍīvraṇa 16), *Rāmapāladeva*⁵¹² (kuṣṭha 74–82), *Rambharāma* (vātavyādhi 227–271),⁵¹³ *Rasasāgara* (prameha 44),⁵¹⁴ *Rasāyanavaidya*⁵¹⁵ (atīśāra 21–22),⁵¹⁶ *Ratnamālā* (atīśāra 30; raktapitta 39–42; rājayakṣman 65–66),⁵¹⁷ *Ratnaparīkṣāśāstra*⁵¹⁸ (vātavyādhi 3–5), *Ratnasāra*⁵¹⁹ (arśas 180),⁵²⁰ *Ravi*⁵²¹ (jvara 106, 115, 117, 119–121, 157–158, 161), *Ravigupta* (jvara 64, 69, 71, 82, 84, 87, 99, 100–102, 104, 124, 149, 150, 185–186; atīśāra 67; grahaṇī 9–11, 20–21, 47–49; krimi 4; pāṇḍuroga 9; raktapitta 22–24, 25, 35–37; rājayakṣman 1–2, 9–12, 22–23, 24–25, 27, 47–60, 75; kāsa 5–6, 37–38, 49, 59–64; hikkāśvāsa 1,⁵²² 6–8, 17; chardi 2–3, 6–11, 13, 19, 27; trṣṇā 10–11, 16, 17, 24; madātyaya 3–6 and 24; unmāda 1–2, 15–16, 29–30, 44–45; apasmāra 3–4; ūrustambha 1–2; āmavāta 35–37; udāvarta 31; gulma 57–59 and 92; mūtrakṛcchra 9 and 19; aśmarī 32; prameha 18, 19, 20, 21; udara 41 and 45; plīhayakṛt 6; śoṭha 20 and 22; vraṇaśoṭha 65–66; bhagandara 3 and 22; upadārṣa 9; kuṣṭha 2, 35, 55, 64, 68, 92, 120–121, 156; visarpa 5 and 7; mukharoga 52 and 73–74; karṇaroga 15; nāsāroga 5 and 21; netraroga 15, 16, 22, 31; nasya 1), *Rugvinīścaya*⁵²³ (jvara 187; madātyaya 21–22; udara 55–56; plīhayakṛt 1; vrddhi 22; vraṇaśoṭha 48; nāḍīvraṇa 1; bhagna 1; kṣudraroga 2), *Rūparatnākara*⁵²⁴ (mukharoga 32–33), *Śabdārṇava*⁵²⁵ (vātavyādhi 106–116 and 227–271; āmavāta 22; vraṇaśoṭha 76–80; nāḍīvraṇa 6), *Śaivasiddhānta*⁵²⁶ (rasāyana 167–189),⁵²⁷ *Śaivatānta*⁵²⁸ (rasāyana 166),⁵²⁹ *śālākya*⁵³⁰ (nasya 8–10),⁵³¹ *Śālākyaśāstra*⁵³² (rājayakṣman 40–46),⁵³³ *Śālihotra* (vātavyādhi 96–105),⁵³⁴ *āmavāta* 7),⁵³⁵ *Sāmbhu*⁵³⁶ (kuṣṭha 52),⁵³⁷ *Samgraha*⁵³⁸ (grahaṇī 77–85; pāṇḍuroga 19–20; raktapitta 35–37; gulma 83–87; hrdroga 25; prameha 18 and 22–26; vidradhi 8; nāḍīvraṇa 16; upadārṣa 1–2; visarpa 14; kṣudraroga 1, 35–37, 66–71; mukharoga 20, 27, 32–33),⁵³⁹ *saṃgrahakārāḥ* (jvara 291; kuṣṭha 131–133), *Samgrahakṛt* (jvara 284; śoṭha 48–51; ślīpada 7; kuṣṭha 134–135; kṣudraroga 96),⁵⁴⁰ *saṃgrahakṛtaḥ*⁵⁴¹ (kṣudraroga 24–25 and 98; mukharoga 27), *Samgrahāntara* (udarda 3 and 15; amlapitta 1), *saṃgrahavyākhyātaraḥ*,⁵⁴² (vidradhi 8) *Samkarabhāṣītalohakalpa*⁵⁴³ (kuṣṭha 17),⁵⁴⁴ *Samyogasvabhāva*⁵⁴⁵ (jvara 244–246),⁵⁴⁶ *Sanātana*⁵⁴⁷ (agnimāndya 11–12 and 14–15; śūla 50–51; gulma 46), *Sanātana's Vallabhā* (arśas 147–151; agnimāndya 11–12), *Sandhyākara*⁵⁴⁸ (rājayakṣman 40–46), *Sārāvalī*⁵⁴⁹ (jvara 2), *Sāroccaya*⁵⁵⁰ (arśas 147–151),⁵⁵¹ *Śaunaka* (jvara 64 and 65–68; arśas 159–164), *Siddhasāra*⁵⁵² (jvarātīśāra 1–2; atīśāra 98 and

102; arśas 4–7;⁵⁵³ pāṇḍuroga 8, 25, 26, 30; rājayakṣman 47–60; hikkāśvāsa 6–8; madātyaya 10; apasmāra 3–4; vātavyādhi 140 and 175–179; udāvarta 6; gulma 31–32; udara 16 and 58; plīhayakṛt 8 and 9; vṛṇaśoṭha 50, 85, 90; nāḍivṛṇa 1; upadaṃśa 1–2; visarpa 14, 19, 33; kṣudraroga 32 and 99; mukharoga 11 and 52; rasāyana 167–189; vamaṇa 6; vireka 2, 10–15, 16; nasya 12), *Siddhayoga*⁵⁵⁴ (jvara 3; jvarātīsāra 1–2; prameha 30–37; netraroga 18), Somadāsa's *Karmamālā*⁵⁵⁵ (agnimāndya 11–12),⁵⁵⁶ Śrīdharapāṭaṇḍījāla(gaṇita)śāstra (jvara 65–68),⁵⁵⁷ Śrīkaṇṭha (kaṇaroga 30),⁵⁵⁸ Śrīkaṇṭha's *Amṛtavalli*⁵⁵⁹ (amlapitta 1), *Śubha*⁵⁶⁰ (mukharoga 53), Śubhaṃkara⁵⁶¹ (vṛṇaśoṭha 56–57; kṣudraroga 81–82), Sudāntasena (pāṇḍuroga 9; rājayakṣman 9–12; chardi 27; madātyaya 11–12; mukharoga 73–74; sneha 13–14), *Sūdasāstra*⁵⁶² (jvara 31–32 and 44; rājayakṣman 13–15; madātyaya 15; āmavāta 61–65; vamaṇa 14),⁵⁶³ *Śukatantra*⁵⁶⁴ (jvara 2),⁵⁶⁵ Suśruta (passim), suśrutapāṭhānurvādinah (kṣudraroga 1), Suvīra⁵⁶⁶ (vṛṇaśoṭha 99), *Svalpavāgbhaṭa* (pāṇḍuroga 35–40; prameha 30–37 and 47–49; śoṭha 48–51; kuṣṭha 131–133; mukharoga 41 and 71; kaṇaroga 16 and 23–24), Svāmīdāsa⁵⁶⁷ (jvara 5), *Svarasāyana*⁵⁶⁸ (āmavāta 29–34),⁵⁶⁹ *Tantra* (kaṇaroga 38), *tantrāntara* (jvara 5, 8–9, 34, 49, 64, 124, 150; arśas 18–22, 100–103, 153–158; agnimāndya 90–91; krimi 10; pāṇḍuroga 11; raktapitta 39–42 and 66–73; kāsa 59–64 and 65–68; chardi 1; unmāda 21–28; apasmāra 7–8; vātavyādhi 227–271; vātarakta 13; āmavāta 15–18 and 23–28; pariṇāmaśūla 21–22 and 75–76; gulma 71–72; udara 1, 16, 58; plīhayakṛt 26–29; śoṭha 8, 33–34, 48–51; vṛṇaśoṭha 49, 76–80, 91–92; nāḍivṛṇa 16; kuṣṭha 57, 63, 74–82, 131–133, 134–135; amlapitta 23–24;⁵⁷⁰ visarpa 2 and 33;⁵⁷¹ kṣudraroga 23, 35–37, 66–71, 96; mukharoga 8, 20, 51, 58cd; kaṇaroga 41; nāsāroga 29–31; netraroga 6; rasāyana 160, 166, 190–195; vṛṣya 15–25⁵⁷² and 50–51;⁵⁷³ sneha 13–14 and 21–22; vireka 28; anuvāsana 24–25; nirūha 13, 22–25,⁵⁷⁴ 26–27, 28–30,⁵⁷⁵ 31),⁵⁷⁶ *Tantrapradīpa*⁵⁷⁷ (pariṇāmaśūla 54; mukharoga 16 and 17), *Tattvakalikā*⁵⁷⁸ (vṛṇaśoṭha 46, 54, 56–57; vṛṣya 55),⁵⁷⁹ *ṭikākāra* (visarpa 2), *ṭikākārāḥ* (bhagna 16–27), *ṭikākṛt* (rājayakṣman 61–63), *ṭikākṛtaḥ* (jvara 17; grahaṇī 72–76; raktapitta 34; hikkāśvāsa 19–20; tṛṣṇā 10–11), *Ṭippaṇī* (kuṣṭha 41),⁵⁸⁰ *Tīsaṭa*⁵⁸¹ (jvara 3 and 19; vidradhi 15; visarpa 34; masūrīkā 24), Trilocanadāsa (vātavyādhi 150–154),⁵⁸² udicyāḥ,⁵⁸³ (anuvāsana 33),⁵⁸⁴ Ugrasena⁵⁸⁵ (nāḍivṛṇa 5),⁵⁸⁶ *Ujjvalakośa*⁵⁸⁷ (vātavyādhi 3–5), Umāpati⁵⁸⁸ (āmavāta 29–34), *Uttarakārikā* (vamaṇa 16; anuvāsana 33),⁵⁸⁹ Vāgbhaṭa (passim), Vāgbhaṭa's *Svalpasamhitā*⁵⁹⁰ (kāsa 30–31), *Vaidyaprādīpasamgraha* (jvara 3),⁵⁹¹ *Vaidyapradīpa*⁵⁹² (jvara 48; jvarātīsāra 1–2 and 16–25; atīsāra 30, 77 and 93–94; grahaṇī 5–6, 7, 29–36, 77–85; arśas 4–7 and 152; krimi 12; kāsa 30–31; hikkāśvāsa, intr.; tṛṣṇā 1 and 10–11; kuṣṭha 17; visarpa 41–42; kṣudraroga 104–106; mukharoga 113–117; kaṇaroga 16 and 38; nāsāroga 1; netraroga 20; vṛṣya 50–51 and 56; anuvāsana 14–18), *Vaidya(pīa)sāra* (rājayakṣman 40–46;⁵⁹³ kuṣṭha 116–119),⁵⁹⁴ *Vaidyaprasāraka*⁵⁹⁵ (jvara 133, 247–252, 253–254, 256–257; atīsāra 64; grahaṇī 20–21; arśas 111–114; rājayakṣman 9–12; āmavāta 35–37; śūla 50–51; gulma 57–59; hṛdroga 26–29; prameha 44; vṛddhi 27–30; kuṣṭha 17, 74–82, 104–110, 116–119, 131–133, 144–147; kṣudraroga 60–62, 66–71, 72–75; mukharoga 11, 73–74, 113–117; kaṇaroga 23–24; nāsāroga 2–3; vṛṣya 15–25; nirūha 26–27), vaiṣṇavālī (anuvāsana 33),⁵⁹⁶ Vaitaraṇa (aśmarī 47–49; bhagna 16–27; kuṣṭha 63; mukharoga 46–47; nirūha 28–30), Vallabha (vṛṣya 38–44),⁵⁹⁷ *Vallabhā*⁵⁹⁸ (jvara

84; agnimāndya 12–13 and 14–15; krimi 4; pāṇḍuroga 9; raktapitta 66–73; gulma 47; prameha 17; vṛṇaśoṭha 75), *Vaṅgadesīya Gandhaśāstra*⁵⁹⁹ (vātavyādhi 227–271),⁶⁰⁰ *Vaṅgasena* (āmavāta 29–34), *Vāpyacandra*⁶⁰¹ (jvara 10–11; atisāra 60; agnimāndya 77; mūrchā 11–12; gulma 91; sthauḷya 29; udara 51; bhagandara 5; kuṣṭha 8–12), *Varāhamihira* (jvara 64 and 292),⁶⁰² *Vararuci* (raktapitta 82–96),⁶⁰³ *Vasiṣṭha* (kāsa 59–64),⁶⁰⁴ *Vedavākya* (raktapitta 82–96), *Vibhākara*pādāḥ⁶⁰⁵ (arśas 165–171),⁶⁰⁶ vātavyādhi 205–226; prameha 44), *Videha* (jvara 1, 20, 178–179, 277–278; jvarātisāra 1–2; grahaṇī 20–21; kāsa 43; vātavyādhi 87 and 180–184; plīhayakṛt 19–23; kṣudraroga 7, 12, 15, 49, 58–59, 66–71, 81–82, 83, 84–95, 93, 96, 98, 112, 126–133; mukharoga 11, 25–26, 32–33, 43, 68, 69, 70, 89, 97–98; karṇaroga 8–9, 11–12, 13, 16, 23–24, 30, 33–34, 36, 43, 49; nāsāroga 2 and 7–8),⁶⁰⁷ *Vijayarakṣita* (intr. verses), *Vikramādityadeva*⁶⁰⁸ (arśas 83–92), *Vimāna* (jvara 18),⁶⁰⁹ *vīravarmāṇaḥ*⁶¹⁰ (anuvāsana 33),⁶¹¹ *Viṣṇupurāṇa* (vṛṣya 15–25), *Viṣṇuvarman*⁶¹² (udara 51), *Viśvāmitra* (arśas 142–146; gulma 57–59; kṣudraroga 126–133), *Viśvasāra*⁶¹³ (galagaṇḍa 19),⁶¹⁴ *Viśvavallabha*⁶¹⁵ (kuṣṭha 159), *Vṛddhakāśyapa*⁶¹⁶ (hikkāśvāsa 19–20; udara 31–38), *Vṛddhasaṅghita* (jvara 292),⁶¹⁷ *Vṛddhasuśruta* (vātavyādhi 3–5; śūla 1 and 59–60; gulma 17; sneha 13–14), *Vṛddhavāgbhaṭa* (jvara 3, 211, 237–238, 272–274, 277–278, 288–290, 291; arśas 127–131; pāṇḍuroga 4–6, 11, 12–18; rājayakṣman 47–60; vātavyādhi 3–5, 13–15, 36, 70, 81–85, 95, 138–139, 140; vātarakta 4; gulma 9–10, 41–42, 50–56, 57–59; mūtrāghāta 3; āsmari 50–53; prameha 6–7, 15, 16, 18, 19, 20, 30–37, 47–49; udara 27–30 and 45; śoṭha 38–39 and 40–51; vṛddhi 23; vṛṇaśoṭha 99; mukharoga 113–117), *vṛddha*(vaidya)(vyavahāra) (jvara 20; grahaṇī 72–76; arśas 14 and 83–92; pāṇḍuroga 11; raktapitta 7 and 15; kāsa 10–15 and 59–64; hikkāśvāsa 19–20, 24–29, 30–33; svarabheda 6; trṣṇā 23; apasmāra 23–28; vātavyādhi 27, 62–63, 74–75, 87, 106–116, 205–206, 227–271; ānavāta 29–34 and 35–37; śūla 50–51; parīṇamaśūla 21–22, 26–28, 32–35, 75–76; gulma 47; hr̥droga 10; mūtrāghāta 15; āsmari 37–38; prameha 44; udara 48; plīhayakṛt 2; vṛṇaśoṭha 98; nāḍivṛaṇa 8; kuṣṭha 46, 55, 74–82, 111–115, 116–119; udarda 2; kṣudraroga 92 and 121; karṇaroga 30; sneha 15–16; vireka 16; anuvāsana 5 and 24–25; nirūha 4–6, 20–21, 26–27, 31), *Vṛddhavideha*⁶¹⁸ (vātavyādhi 162–170), *Vṛṇḍa*⁶¹⁹ (jvara 3, 64, 65–68, 116, 162–164, 178–179, 235; jvarātisāra 26–27; atisāra 54–56; grahaṇī 14–15 and 72–76; raktapitta 39–42; rājayakṣman 13–15 and 65–66; hikkāśvāsa 24–29 and 30–33; svarabheda 13; madātīyaya 21–22; unmāda 7 and 31–33; vātavyādhi 3–5, 88–92, 1400; vātarakta 13, 21–23, 41; ānavāta 9 and 35–37; śūla 50–51; udāvarta 25; mūtrāghāta 1; āsmari 13–16; prameha 16; sthauḷya 5; udara 1, 48, 55–56; śoṭha 8 and 48–51; vṛddhi 22; ślīpāda 24–30; vṛṇaśoṭha 48, 59, 65–66, 68; nāḍivṛaṇa 1, 3, 22; bhagandara 6, 13–17, 23; upadaṁśa 4, 5, 11, 13; bhagna 10, 11, 14–15, 16–27; kuṣṭha 2, 8–12, 24, 91, 111–115, 134–135, 150, 160–161; udarda 7; amlapitta 1, 12, 20, 23–24; visarpa 3–4; masūrikā 5, 7, 39; kṣudraroga 2, 10, 16, 20, 21–22, 23, 31, 35–37, 66–71, 81–82, 117–120; mukharoga 1, 9, 15, 32–33, 48, 52, 53, 54, 82, 96; karṇaroga 18–22, 23–24, 28, 30, 33–34, 38, 57, 59, 61; nāsāroga 17, 22, 28; netraroga 2, 14, 20; vṛṣya 15–25; sneha 2 and 8–10; vamaṇa 9; anuvāsana 5, 24–25, 35; nirūha 22–25), *Vṛṇḍakuṇḍa*⁶²⁰ (jvara 20, 65–68, 199–200, 235; arśas 147–151; vātavyādhi 227–271), *Vṛṇḍakuṇḍa*'s *Siddhayaoga* (jvara 3), *Vṛṇḍasaṃgraha* (jvara 175–177; agnimāndya 5; unmāda 21–28;

udara 59–62; visarpa 30; netraroga 19), *Vṛndaṭippaṇī* (raktapitta 39–42; karṇaroga 30), *Vyāḍi*⁶²¹ (rājayakṣman 28–29), *Vyagradaridraśubhaṅkara*⁶²² (vraṇaśoṭha 46, 48, 55; bhagandara 10; upadaṁśa 10; bhagna 10 and 11; kuṣṭha 63), *Vyāsa*⁶²³ (rājayakṣman 24–25),⁶²⁴ *Yogamālā*,⁶²⁵ *Yogamañjarī*⁶²⁶ (jvara 2; netraroga 36), *Yogapañcāśikā*⁶²⁷ (hikkāśvāsa 11–14),⁶²⁸ *Yogarātnākara*⁶²⁹ (jvara 2 and 32; grahaṇī 93–99; arśas 76–82 and 180;⁶³⁰ prameha 44),⁶³¹ *Yogarātnasamuccaya*⁶³² (atīśāra 67;⁶³³ kāsa 65–68),⁶³⁴ *Yogarātnasārasamuccaya*⁶³⁵ (jvara 237–238),⁶³⁶ *Yogaśata*⁶³⁷ (jvara 1, 141, 277–278; arśas 63–75 and 147–151; agnimāndya 11–12; hikkāśvāsa 9 and 15; chardi 27; vātarakta 6; śūla 50–51 and 54; gulma 40 and 46; mūtrakṛcchra 7 and 24; āsmaṇī 32; prameha 17; udara 50; kuṣṭha 20; mukharoga 73–74; netraroga 29), *Yogaśataṭikā* (raktapitta 66–73),⁶³⁸ *Yogaśataṭikākāra* (gulma 46),⁶³⁹ and *Yogayukti*⁶⁴⁰ (jvara 170; grahaṇī 7; krimi 12; raktapitta 66–73; kāsa 65–68; hikkāśvāsa 24–29; madātyaya 17–19; ānavāta 8; ślīpada 16; vraṇaśoṭha 1–2; sveda 16–17).⁶⁴¹

Sources mentioned in D.Ch. Bhattacharyya's article and not found in the edited text are: *Amṛtasāra*,⁶⁴² *Bhīṣagayukti*, *Dhanurveda*,⁶⁴³ *Vaidyasāra*, *Loharasāyana*, *Nandanacanda*, and *Vikramaparākrama*.⁶⁴⁴

Niścala and his *Ratnaprabhā* are quoted by Āḍhamalla,⁶⁴⁵ the glossator on the *Rasaratnākara*, Gopāladāsa in his *Cikitsāmrta*,⁶⁴⁶ Govindasena in the comments on his *Paribhāṣāpradīpa*, Jīvānandavidyāsāgara in his commentary on the *Rasendrasārasaṅgraha*, and Śivadāsasena in his commentaries on the *Cakradatta* and the *Uttarasthāna* of the *Aṣṭāṅghṛdayasamṛhita*.

The author mentions his name, Niścalakara, in the introductory verses of his commentary, which also acquaint us with the names of his parents, Lakṣmī and Sadānandakara. He obviously belonged to the Kara family of physicians, known as one of the lines of Bengali vaidyas from Bharatamallika's *Candraprabhā*. Evidence found in the *Ratnaprabhā* suggests that he belonged to the part of Bengal called Rāḍha or Rādhā.⁶⁴⁷

D.Ch. Bhattacharyya pointed to a detail in the formula of *pāṇīyavaṭikā*⁶⁴⁸ that might also confirm Niścala's Bengal origin. The author of this prescription recommends, before taking these pills, the worship of Karuṇāchhāra and Khasarpaṇa.⁶⁴⁹ Khasarpaṇa, a manifestation of Lokanātha,⁶⁵⁰ was revealed to an upāsaka called Śubhaṅkara in a village of the name Khasarpaṇa, situated in the Khāḍī maṇḍala of Bengal.⁶⁵¹

Niścala is described as a court physician in charge of the women's departments (antaḥpuravaidya) and as a mahāmahopādhyāya in the colophon of the chapter on jvara. His position as a royal physician is confirmed by the functions held by some of his patients. The identity of the king who was his patron depends on his date.

The maṅgala of the *Ratnaprabhā* indicates that he was a Śaiva.

Niścala wrote another medical treatise before he began work on the *Ratnaprabhā*.⁶⁵²

Niścala's floruit depends on several disputed clues. One of these is the identity of his teacher. D.Ch. Bhattacharyya considered Vijayarakṣita to have been Niścala's guru. P.V. Sharma, being convinced that he cannot possibly have been Vijayarakṣita,

advanced the thesis that this teacher belonged to Vijayarakṣita's tradition, but lived about three quarters of a century later.

D.Ch. Bhattacharyya⁶⁵³ assumed Nīścala's teacher to have been a pupil of Vijayarakṣita on the basis of the introductory verses of the *Ratnaprabhā*, which state that Nīścala started writing his commentary after the passing away of Vijayarakṣita; Nīścala adds that the disappearance of Vijayarakṣita resulted in an improper interpretation (kubodha) of the *Cakradatta*, which deplorable state of affairs he intends to remedy by the composition of his commentary.⁶⁵⁴

P.V. Sharma claims that the reference to Vijayarakṣita as an āyurvedaguru does not necessarily imply that he was Nīścala's instructor in āyurveda, but may indicate that Vijayarakṣita was honourably remembered as a medical authority. In this he may be right. He adds that it is unusual for Indian authors to mention the name of their teacher; this is, however, not a hard rule.⁶⁵⁵ Nīścala's statement that the light of the proper elucidation of the *Cakradatta* had become dull after Vijayarakṣita's death points, according to P.V. Sharma, to a long interval of time between Vijayarakṣita and Nīścalakara. This long period was also necessary, in P.V. Sharma's eyes, for the *Cakradatta* to supersede the *Siddhayoga* in popularity to such a degree that a commentary was written on the former treatise.⁶⁵⁶

The first argument cannot be regarded as persuasive. The second argument disagrees with the first one, because Vijayarakṣita did comment, at least orally, on the *Cakradatta*, while his pupil Śrīkaṇṭhadatta wrote, somewhat later, his *Kusumāvalī* on the *Siddhayoga*. Moreover, P.V. Sharma himself surmises that Śrīkaṇṭhadatta also wrote a commentary on Cakra's *Cikitsāsāmagra*.⁶⁵⁷

The *Ratnaprabhā* quotes both Rakṣita and a guru, as well as a book written by the guru and this guru's tradition.

The quotations from Rakṣita, usually reverentially called Rakṣitapādāh, are partly very close to or identical with remarks found in Śrīkaṇṭhadatta's *Kusumāvalī* on the *Siddhayoga*; another part may derive from his comments on the *Cakradatta*. It cannot be excluded that his interpretations of verses common to *Siddhayoga* and *Cakradatta* are from his explanations concerning the latter work. However that may be, it can confidently be taken for granted that he was well acquainted with both *Siddhayoga* and *Cakradatta*.

An examination of the quotations from Nīścala's guru, often respectfully called gurupādālī, confronts us with a remarkably similar situation. These citations are partly almost identical with passages of the *Kusumāvalī*;⁶⁵⁸ another part are not found there, being concerned with verses of the *Cakradatta* that were not taken from the *Siddhayoga*.⁶⁵⁹ The quotations from the guruparamparā and gurusampradāya are of a different character, being not found at all or not literally, in the *Kusumāvalī*.⁶⁶⁰ Those from the *Gurugrantha*, in prose, are absent from the *Kusumāvalī*.

This body of data does not establish that Vijayarakṣita was Nīścala's teacher, but suggests that there are no cogent reasons to claim that Nīścalakara lived a long time after Vijayarakṣita. Nīścala's intimate knowledge of Vijayarakṣita's interpretations of *Siddhayoga* and *Cakradatta*, probably not laid down in a complete commentary,⁶⁶¹ is rather indicative of a not too long interval between Vijayarakṣita's decease and Ni-

ścala's literary activity. The detailed acquaintance with Cakrapāṇi's sources, displayed by Nīścala, corroborates this view, because this type of information must have been supplied to him by someone not far removed in time from the compilation of the *Cakradatta*, unless it was found in an earlier commentary.

Commentators on the *Cakradatta* who preceded Nīścala are referred to in the *Ratnaprabhā*.⁶⁶²

A remarkable feature of the *Ratnaprabhā* is the absence of quotations from Śrīkaṇṭhadatta's *Kusumāvalī* on the *Siddhayoga*, a work with which Nīścala must have been well acquainted, if he is later than this pupil of Vijayarakṣita. The Śrīkaṇṭha to whom Nīścala refers appears to be a different author, in spite of P.V. Sharma's assertion to the contrary.⁶⁶³ D.Ch. Bhattacharyya regarded Śrīkaṇṭhadatta as a contemporary of Nīścala.⁶⁶⁴

P.V. Sharma's thesis that a long period of time separates Nīścala from Cakrapāṇidatta is in his own opinion confirmed by Nīścala's adverse criticism of Cakra's pupils (cakraśiṣyāḥ),⁶⁶⁵ although this connection between criticism and the passage of time is not self-evident at all. Apart from this, I cannot endorse the claim that Nīścala rejects the views advanced by these pupils, which are quoted from some unidentified work in verse. In addition, the citation adduced to prove Nīścala's critical attitude⁶⁶⁶ is the only one occurring in the *Ratnaprabhā* that lends itself to different interpretations; the context of the remaining two is neutral in tone.⁶⁶⁷

The date P.V. Sharma proposes for Nīścala is A.D. 1275.⁶⁶⁸ This late dating is connected with his chronological scheme for a number of authors quoted in the *Ratnaprabhā*; he assigns Vaṅgasena to A.D. 1200, Indu to A.D. 1225, and the Mādhava who wrote the *Dravyaṇṇa* to A.D. 1250.

The single quotation from Vaṅgasena's *Samgraha*⁶⁶⁹ has not been traced in this author's *Cikitsāsārasamgraha*.⁶⁷⁰ The supposition that Nīścala consulted a MS of Vaṅgasena's treatise that contained the formula cited does not imply that Nīścala is later than A.D. 1200, since P.V. Sharma's date of Vaṅgasena was reached on insufficient grounds; Vaṅgasena was already known to Ḍaḥṇa, which pushes the former's date back to the twelfth century.⁶⁷¹ The quotations from Indu are unsuitable to chronological purposes, because Indu's date depends on that of Nīścala.⁶⁷² The *Mādhavadravyaṇṇa* is in my opinion earlier than P.V. Sharma supposes it to be.⁶⁷³

P.V. Sharma also claims that Nīścala quotes Ḍaḥṇa anonymously and follows his views in the interpretations of drugs.⁶⁷⁴ Unfortunately, P.V. Sharma refers, in order to prove his point, to parts of the *Ratnaprabhā* that have not been preserved,⁶⁷⁵ which precludes verification of his claim. Moreover, anonymous quotations from Ḍaḥṇa's *Nibandhasamgraha* may be from one of Ḍaḥṇa's sources, such as the commentaries of Jejjāṭa, Gayadāsa and Cakrapāṇidatta.⁶⁷⁶ However that may be, the hypothesis that Ḍaḥṇa was one of Nīścala's sources does not conflict with an earlier date of Nīścala than the one proposed by P.V. Sharma; Ḍaḥṇa lived in the latter half of the twelfth century, or even in its first half if P.V. Sharma is right in assigning him to about A.D. 1150.⁶⁷⁷

A problem is raised by P.V. Sharma's discovery that an anonymous quotation found in the *Ratnaprabhā* is identical with two verses of the *Guṇasamgraha* of the

Soḍhalanighaṇṭu,⁶⁷⁸ a work usually placed about A.D. 1200.⁶⁷⁹ This quotation may, however, be from one of *Soḍhala*'s sources.

The dates of some other authors and works quoted in the *Ratnaprabhā* do not conflict with placing *Niścāla* in the latter half of the twelfth century. The identification of *Dharaṇīdhara* as *Dharaṇīdāsa*, the author of the *Anekārthasāra*, poses no problems, because *Dharaṇīdāsa* lived in the early twelfth century.⁶⁸⁰ The two quotations from the *Hārāvalī*, which are on the same subject, could not be traced in *Puruṣottama*'s *Hārāvalī* by D.Ch. Bhattacharyya. Even their presence in *Niścāla*'s copy of the lexicon would not invalidate an earlier date of *Niścāla*, since *Puruṣottama* lived in the first half of the twelfth century.⁶⁸¹

A disputed piece of evidence concerning *Niścāla*'s date is his reference to king *Rāmapāla* of Bengal.⁶⁸² *Niścāla* describes an audience given by this king to the king of *Kāmarūpa*. D.Ch. Bhattacharyya, the earliest author to draw attention to this passage,⁶⁸³ was convinced that the vivid and flowery depiction of this event, in combination with the panegyric epithets applied to *Rāmapāla*, prove that this king was still alive when *Niścāla* wrote his commentary, which would place the latter in the first quarter of the twelfth century.⁶⁸⁴ P.V. Sharma⁶⁸⁵ disagrees with D.Ch. Bhattacharyya; he argues that *Rāmapāla*'s name would have appeared in the introductory verses of the *Ratnaprabhā*, if he had been *Niścāla*'s patron, as D.Ch. Bhattacharyya asserts. Moreover, *Niścāla* is not mentioned as a member of *Rāmapāla*'s medical staff; the name of the chief physician of the king was *Bhadreśvara*. P.V. Sharma suggests that the information concerning the meeting of *Rāmapāla* with the king of *Kāmarūpa* may have reached *Niścāla* through the traditions centering round the impressive figure of *Rāmapāla*, who took great interest in the development of academic institutions and founded the *Mahāvihāra* of *Jagaddala* in North Bengal.⁶⁸⁶ P.V. Sharma's argumentation does not carry conviction in my eyes, because the style of *Niścāla*'s account of the audience shows that it was still a lively memory to the one who reported about it. *Niścāla* may well have met someone who was present on the occasion, if he lived in the second half of the twelfth century.

The Buddhist elements in the *Ratnaprabhā* have also been used as clues to *Niścāla*'s chronological position. These elements consist of: references to Buddhist texts, such as the *Amoghajñānatantra* and *Bodhicaryāvatāra*,⁶⁸⁷ a Buddhist author like *Dharmakīrti*,⁶⁸⁸ Buddhist deities like *Khasarpaṇa*, *Lokanātha*⁶⁸⁹ and *Tārā*.⁶⁹⁰ These references made D.Ch. Bhattacharyya⁶⁹¹ claim that *Niścāla* undoubtedly flourished at a time when Buddhism was still reigning supreme in Bengal, and certainly before the Muslim armies destroyed the Buddhist universities of *Bihār*, which would place him in the last quarter of the twelfth century at the latest. P.V. Sharma rejects D.Ch. Bhattacharyya's arguments and emphasizes that Buddhist culture remained conspicuously present in Bengal until A.D. 1350. He says that, though *Muḥammad Bakhtiyār* (he probably means *Ikhtiyār-ud-Dīn Muḥammad*, son of *Bakhtiyār Khaljī*) destroyed *Odantapurī Vihāra*⁶⁹² in 1199 and *Vikramaśīla Vihāra*⁶⁹³ in 1200, the *Jagaddala Vihāra*⁶⁹⁴ in northern Bengal, where Buddhist monks took refuge, continued for another one hundred and fifty years. He adds that Bengal and *Bihār* enjoyed again uninterrupted peace during the rule of *Ghiyās-ud-Dīn Khaljī*, and that Muslim rule

was not well established beyond Varendra till the foundation of the independent Bengal Sultanate under the house of Balban about one hundred years after the death of Ghiyās-ud-Dīn Khiljī.⁶⁹⁵

In my opinion, an accurate determination of Niścāla's date cannot be reached by help of the references to Buddhism.

Almost all the evidence available does not conflict with placing Niścāla in the second half of the twelfth century,⁶⁹⁶ which would also explain that he does not refer to Ḍaḥaṇa and Soḍhala by name. The single piece of evidence that might invalidate the proposed date is the anonymous quotation agreeing with some verses of the *Soḍhalanighaṇṭu*. Crucial in this respect is the unresolved question of Soḍhala's sources.

One of the MSS of the *Cakradatta* with Niścālakara's commentary (CBORI XVI, 1, Nr. 63) contains an interpolated portion of text and commentary, which covers netraroga 38–158, and the chapters on śīroroga, strīroga, bālaroga, viṣa, rasādiśodhanamāraṇa, śoṇitasrāva, and doṣavivarāṇa. The text of the chapters on śīroroga, strīroga, bālaroga and viṣa largely agrees with the text of the *Cakradatta*; the text of netraroga 38–158, rasādiśodhanamāraṇa and śoṇitasrāva has almost in toto been drawn from the *Śāriṅgadharasaṃhitā*, while a smaller part has been taken from Vaṅgasena and the *Yogarātnākara*. The chapter on doṣavivarāṇa has been borrowed from the *Yogarātnākara*.

The text of the commentary on those parts which were taken from the *Śāriṅgadharasaṃhitā* is based on Āḍhamalla's commentary on that treatise.

Sources quoted in the interpolated portion of the commentary are: Amitaprabhācārya, Bhāluki, Bheḍa, Bhoja, *Candraṭīyatantrāntara*, Caraka, *Carakottaratāntara*, Dṛḍhabala, Jatūkarṇa, Jejjāta, Kāśyapa, Kṣārapāṇi, *Nāgārjunabhartṛtantra*, Nimi, Puna-rvasu, *Siddhasāra*, Suśruta, Suśrutādhyāyin, Vāgbhaṭa, Videha, *Vṛddhabhoja*, and *Vṛddhavāgbhaṭa*.⁶⁹⁷

Śivadāsasena

Śivadāsasena⁶⁹⁸ says that he wrote his *Tattvacandrikā*⁶⁹⁹ because the *Cakrasaṃgraha* had become obscured by the darkness of bad commentaries.⁷⁰⁰ It is, as the author himself states in the introductory and concluding verses, an abridged version of Niścālakara's *Ratnaprabhā*, from which difficult passages are left out, while interpretations are added which differ from those by Niścālakara. Although Śivadāsa left out a large number of Niścāla's references, numerous works and authors are still quoted in his work.

These authorities and works are: ādhunikāḥ (arśas 114), Aghorācārya (rasāyana 92–94),⁷⁰¹ Agniveśa (jvara 17–18 and 64; raktapitta 14; nirūha 8–10), *Agniveśasaṃhitā* (jvara 29), Amara (rasāyana 159–171), Amogha (rasāyana 79),⁷⁰² *Amṛtasāra* (arśas 169–176), *Amṛtavallī* (vr̥ṣya 9), Aruṇa(datta) (grahaṇī 32–34; tṛṣṇā 8; mūtrāghāta 3; sneha 10–11; svastha 4–5 and 26–29),⁷⁰³ *Āyurveda* (kṣudraroga 84–85), *Āyurvedasāra* (jvara 82, 133, 161, 232; atisāra 21; grahaṇī 9–11; arśas 96–99; raktapitta 66–73; mūtrāghāta 3; plīhayakṛt 33–47; śoṭha 44–46; galagaṇḍa 39; nāḍīvaraṇa 3; kuṣṭha 106–112 and 160), Bakula (jvara 117; śīroroga 51), Bhadra (jvara 55),⁷⁰⁴ *Bhaiṣajyaratnāvalī*,⁷⁰⁵ Bhāluki (jvara 157–158), *Bhānumatī* (vātavyādhi 59–64;

ānāha 10; vṛṇaśoṭha 8–9; anuvāsana 5; nirūha 20–23; kavala 4), Bhaṭṭārahariścandra (jvara 49),⁷⁰⁶ Bhaṭṭatraya (svastha 53), Bhavyadatta (arśas 27–28), Bhavyadattadeva (rasāyana 38–40), Bhela (jvara 55 and 182–183; vamaṇa 14–15), Bhoja (atisāra 21–22; udāvarta 17; gulma 83–87; āsmaṛī 48–54; galagaṇḍa 31; nirūha 21), Bhojarāja (rasāyana 77–78), Bindusāra (jvara 201; raktapitta 25; viṣa 5–6), Brahmadatta (āsmarī 2–4),⁷⁰⁷ Brahmadevā (śūkaḍoṣa 10),⁷⁰⁸ Brhaṭṭikā (svastha 53),⁷⁰⁹ Cakra (often), *Cakrasaṃgraha* (plihayakṛt 6; rasāyana 196–201; svastha 53), *Cakravayākhyā* (i.e., the *Āyurvedaḍṭipikā*) (mukharoga, kaṇṭhagatarogacikitsā 19–20), Candrakalāṭṭikākāra (atisāra 65),⁷¹⁰ Candrāta (jvara 71, 75, 178–179, 213, 282; jvarātisāra 18–20; grahaṇī 53–57; arśas 116–122; agnimāndya 2; pāṇḍuroga 32; raktapitta 17 and 29; arocaka 4; śūla 70 and 75–76; vidradhi 20; vṛṇaśoṭha 52; upadaṃṣa 10; kuṣṭha 29 and 136–137; kṣudraroga 66–71; mukharoga, mukhagatarogacikitsā 25–27; netraroga 144–145; bālaroga 25–26; viṣa 8; vṛṣya 15–24; nirūha 23–26 and 29–31),⁷¹¹ Candrāta (in the *Vṛṇḍaṭṭikā*) (agnimāndya 87), *Candrikā* (arśas 138–142; galagaṇḍa 15 and 43; vṛṇaśoṭha 8), Candrikākāra (jvara 42), Caraka (often), *Carakatattvapradīpikā* (by Śivādāsasena) (jvara 256; sneha 1 and 7; vamaṇa 16 and 18), carakaṭṭikākṛtaḥ (atisāra 23–24; raktapitta 27; unmāda 5), *Carakavyākhyā* (nirūha 36), Ḍallaṇa (jvara 103 and 210; atisāra 80; agnimāndya 87; pāṇḍuroga 28; raktapitta 36; chardi 2; tṛṣṇā 2, 3, 7, 10; śūla 75–76; udāvarta 16; ānāha 10; gulma 11; hṛdroga 5 and 12; mūtrāghāta 2 and 3; strīroga 6 and 7; viṣa 11–12),⁷¹² *Deśarasāyanaṭṭikā* (rasāyana 126),⁷¹³ *Dīpikā* (vṛṇaśoṭha 32),⁷¹⁴ *Dravyaguṇa* (jvara 117), *Dravyāvalī* (kuṣṭha 160), Ḍṛḍhabala (jvara 149–150; arśas 129–137; yakṣman 65–66; sneha 6; anuvāsana 27, 33, 36, 41; nirūha 8–10, 11, 21), Gadādhara (rasāyana 172–193), gaudāḥ (gulma 11), gaudīyāḥ (vṛṣya 15–24), Gayadāsa (jvara 256; pāṇḍuroga 2; raktapitta 36; chardi 3; vāṭavyādhi 218–227; āsmaṛī 48–54; galagaṇḍa 25; netraroga 62), Gopurarakṣita (jvara 256), *Guṇapāṭha* (atisāra 10; chardi 19),⁷¹⁵ *Hārāvalī* (vṛṣya 26–36),⁷¹⁶ Hariścandra (jvara 4 and 23; agnimāndya 12; gulma 63–67),⁷¹⁷ Hārīta (jvara 5, 34, 49, 71, 118, 178–179, 218, 261; jvarātisāra 18–20; atisāra 58–60; agnimāndya 78; pāṇḍuroga 1 and 52; yakṣman 22–25; śūla 13–16; gulma 43–44; asṛgdara 2 and 8–11; rasāyana 152, 154–156, 160, 165–166, 196–201; vṛṣya 1; nirūha 27), Jātūkarṇa (jvara 4, 48, 124, 178–179, 198–199, 256; atisāra 61 and 77; grahaṇī 4 and 45–47; arśas 114; kāsa 12; apasmāra 31–32; vāṭavyādhi 190–194; vātarakta 42; prameha 28–29; kṣudraroga 127; karṇaroga 18–22; netraroga 15; rasāyana 196–201), Jejjāta (jvara 29, 42, 255; agnimāndya 30–38 and 74; raktapitta 17; yakṣman 47–60; tṛṣṇā 8; vāṭavyādhi 10 and 94; ānāha 10; mūtrāghāta 16; netraroga 59), Jīvanākhyā (rasāyana 81),⁷¹⁸ *kāmaśāstra* (vṛṣya 61), *Kārikā* (svastha 53), Kārttika (pāṇḍuroga 28; arocaka 2; tṛṣṇā 11; gulma 94; mūtrāghāta 3 and 4; bhagna 15–16), Kārttikakuṇḍa (mūtrāghāta 16), Kharanāda (jvara 49 and 261), Kṛṣṇātreyā (jvara 64 and 256; yakṣman 40–46; chardi 17–18; unmāda 31–33; nasya 25–26), Kṣārapāṇi (jvara 205–207; raktapitta 74–78; yakṣman 65–66; kāsa 13; hikkāśvāsa 19–20; gulma 98), *lauhaśāstra* (rasāyana 38–40 and 62), *Lohapradīpa* (pāṇḍu 9; rasāyana 67–72),⁷¹⁹ Mādhava (‘s *Nidānasamgraha*) (jvarātisāra 1), Mādhavakara (gulma 17),⁷²⁰ Mādhavakara (‘s *Dravyaguṇa*) (jvara 31; agnimāndya 5), *Madhyavāgbhaṭa* (karṇaroga 48),⁷²¹ *Mahābhārata* (jvara 239), Maheśvara (unmāda 6 and 29–30),⁷²² *Maheśvarapatrikā* (āmavāta 1; sthauilya 17), *Medinīkārakośa*

(netraroga 188),⁷²³ Nāgārjuna (agnimāndya 14; chardi 19; śūla 70; rasāyana 34, 76, 123–125, 126),⁷²⁴ Nāmamañjarī (rasāyana 54),⁷²⁵ Nidāna (galagaṇḍa 55), Nighaṇṭakāra (jvara 286),⁷²⁶ Nighaṇṭu (arśas 161–168; śoṭha 10), Nīścala⁷²⁷ (jvara 70, 103, 145; atisāra 40; arśas 18 and 113; agnimāndya 87 and 91; krimi 5; pāṇḍuroga 28; raktapitta 15; tṛṣṇā 22; madātaya 13; dāha 7; vātavyādhi 71 and 156; ūrustambha 12; āmavāta 26; śūla 12–16; parīṇāmaśūla 14 and 15; gulma 11, 43–44, 74–75; prameha 20; udara 42–43; plihayakṛt 6; śoṭha 35–36; vṛṇaśoṭha 50; bhagandara 13–20; amlapitta 17 and 38–50; mukharoga, mukhagatarogacikitsā 2 and 15–16;⁷²⁸ karṇaroga 56; nāsāroga 1 and 2–3; netraroga 22, 87–89, 138–140, 212; śīroroga 2, 25, 49; strīroga 5; bālaroga 22 and 29–30; vṛṣya 11–13 and 26–36; sneha 21), Pālākāpya (svastha 21–24), Parameśvararakṣitādisaṃgraha (rasāyana 196–201),⁷²⁹ Parāśara (atisāra 102), Pātañjala (rasāyana 45–47, 55–56, 76, 81, 122), Patañjali (rasāyana 52–53, 55–56, 61, 63–64, 67–72, 83–84, 107),⁷³⁰ Prayogarātnākara (jvara 31),⁷³¹ Puṣkalāvata (jvara 49), rasaśāstra,⁷³² Rasatarāṅgiṇī,⁷³³ Rasendrasārasaṃgraha,⁷³⁴ Ratnakosā (āsmarī 37–38; plihayakṛt 1),⁷³⁵ Ratnaprabhā⁷³⁶ (jvara 1; nāsāroga 9–10; rasāyana 172–193), Ravigupta (jvara 71; krimi 4),⁷³⁷ Rāvaṇoktakumāratantra (bālaroga 89),⁷³⁸ Rugviniścaya (vṛddhi 23; visarpa 42), Śabdārnava (vātavyādhi 256–277),⁷³⁹ Śaivatantra (rasāyana 172–193), śālākya (netraroga 12),⁷⁴⁰ dhūmapāna 6–7), Śālihotra (jvara 168–170), Saṃgraha (visarpa 30),⁷⁴¹ Saṃgrahakāra (gulma 46; hṛdroga 26),⁷⁴² saṃgrahakārāḥ (raktapitta 27; yakṣman 22–25), Saṃgrahakṛt (yonivyāpda 37–44),⁷⁴³ saṃgrahakṛtaḥ (strīroga 21–24), Siddhasāra (jvarātisāra 1 and 4; asṛgda 8–11; bālaroga 81–82; nasya 12–13),⁷⁴⁴ Siddhayaoga⁷⁴⁵ (svastha 53), Śrīkaṇṭha (jvara 258; tṛṣṇā 18; śūla 64–65; kuṣṭha 106–112; udarda 10; masūrīkā 45–47; kṣudraroga 97; karṇaroga 55; netraroga 62, 110–112, 203; strīroga 13; bālaroga 29–30, Śrīkaṇṭhadatta (vātavyādhi 20–22; udāvarta 17),⁷⁴⁶ Sudānta (rasāyana 1), Sudāntasena (pāṇḍuroga 9), sūdaśāstra (yakṣman 6–7; madātaya 15; śīroroga 50; vamaṇa 16), Suśruta (often), suśrutāṭīkā (visarpa 5), suśrutāṭīkāḥ (bhagna 17–29), suśrutāṭīkākrtaḥ (agnimāndya 88; krimi 5; ; tṛṣṇā 8; mūtrāghāta 5; galagaṇḍa 39), Svalpavāgbhaṭa (karṇaroga 11–13), Tantrapradīpa (rasāyana 172–193), Tantraṭīkā (svastha 53),⁷⁴⁷ Vaitaraṇa (vṛṇaśoṭha 10), Videha (plihayakṛt 19–23; karṇaroga 8–9 and 16; netraroga 3, 16, 151–155; śīroroga 35), Vindhyavāsin (kuṣṭha 17), Viśvāmītra (arśas 138–142 and 143–147; gulma 57–59; mūtrāghāta 3), Vṛddhakāśyapa (hikkāśvāsa 19–20), Vṛddhasuśruta (arśas 107–110; vātavyādhi 88–92), Vṛddhavāgbhaṭa (jvara 277; pāṇḍuroga 5 and 36–41; vātavyādhi 228–233; vātarakta 14; gulma 41–42; prameha 16; udara 29–32; vṛṇaśoṭha 23), Vṛṇḍa⁷⁴⁸ (jvara 29, 103, 162–164, 202, 205–207; jvarātisāra 10–11 and 26–27; grahaṇī 19 and 40; arśas 143–146; krimi 12–14; raktapitta 39–42; yakṣman 65–66; hikkāśvāsa 24–29 and 30–33; vātavyādhi 71, 88–92, 95–99; vātarakta 13 and 23–25; āmavāta 21–23; āsmarī 10 and 13–16; prameha 31–38; plihayakṛt 6; śoṭha 10, 11, 47–50, 51–54; ślīpada 24–30; nāḍīvrāṇa 3; kuṣṭha 152 and 158; amlapitta 17; visarpa 42; mukharoga, dantamūlarogacikitsā 23–24; netraroga 114; strīroga 25–27; vīṣa 1; vṛṣya 15–24; anuvāsana 5; nirūha 23–26; svastha 53), Vṛṇḍasaṃgraha (udara 61–64), Vṛṇḍatippaṇī or -tippaṇīkā (raktapitta 27 and 36; yakṣman 10 and 27; kāsa 5–7; arocaka 2; chardi 12; dāha 7; ūrustambha 12; āmavāta 26; udara 48; vṛṇaśoṭha 43 and 44),⁷⁴⁹ Yogaratnākara (grahaṇī 91–97; rasāyana 35, 38–40, 63–64, 67–72, 83–84,

89–90, 92–94, 107, 129–135), and *Yogarātnākaraśamuccaya* (rasāyana 62–72 and 96–97).⁷⁵⁰

Some⁷⁵¹ assert that Śivadāsa quotes the *Nāvanīta*.

The following among the above-mentioned sources are not referred to or quoted by Niścāla: Aghorācārya, Aruṇa(datta), Brahmādatta, Brahmadeva, *Candratīkā*, Ḍallaṇa, *Guṇapāṭha*, *Lohapradīpa*, Maheśvara, Medinī, *Parameśvararakṣitādisaṅgraha*, *Paṭṭajālī*, *Prayogarātnākara*, *Rasataraṅgiṇī*, *Rasendrasārasaṅgraha*, *Ratnaśāstra*, and *Rāvanoktakumāratantra*.

The absence of some of these can easily be explained by the chronological gap between Niścāla and Śivadāśasena; Aruṇadatta, Ḍalhaṇa and Medinī are later than the former. The reasons Niścāla may have had for not quoting Brahmadeva remain obscure.

Śivadāsa's commentary abounds in interesting observations.⁷⁵² Variant readings are frequently referred to. In general, this author pays much attention to the establishment of a correct text, by consulting manuscripts,⁷⁵³ pointing to wrong readings,⁷⁵⁴ verses to be rejected, etc.⁷⁵⁵ An important authority for the text of the *Aṣṭāṅghr̥daya* was Aruṇadatta; Niścāla was consulted for the text of the *Cakradatta*. Śivadāsa is more than once critical of Vṛnda⁷⁵⁶ and sometimes disagrees with Niścāla.⁷⁵⁷

Accurateness in the methods of preparing compound medicines is one of his concerns, as is the identity of medicinal substances.

Śivadāsa and the *Tattvacandrikākāra*, the *Tattvacandrikā* and the *Śivadāśavyākhyā* are quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnaśamuccaya*. Śivadāsa and his *Cakratīkā* are quoted in Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*. A *ṭīkā* on the *Cakradatta*, probably Śivadāśasena's *Tattvacandrikā*, is quoted in Guḷrājārmamiśra's *Viśikhānupraveśajñāna* and Jīvanandavidyāsāgara's commentary on the *Rasendrasārasaṅgraha*.

Śivadāśasena's commentary on Cakrapāṇi's *Dravyaguṇasaṅgraha*⁷⁵⁸ has no title.

The following authorities and works are quoted or referred to: *Agniśaṭatantra* (pānīya 31), Aruṇa (śāka 1.7; pānīya 31), asmadguru (pānīya 37), *Bhānumatī* (phala 13), Bhaṭṭārahariścandra (phala 1 and 7), Bhoja (phala 30; kṣīra 13; aikṣava 17; āhāravidhi 22), Brahmadeva (māṃsādi 2.36; śāka 1.14), Cakra (dhānya 1.40; māṃsādi 1.2 and 6; śāka 1.3, 42, 46; śāka 2.27; lavaṇādi 6, 15, 17, 20; phala 1, 5, 7, 9, 36; pānīya 25 and 29; aikṣavādi 17; kṛtānna 8), *Candrikā* (phala 10, 11, 13, 29, 36; pānīya 29; kṣīra 6 and 20), *Candrikākāra* (phala 1 and 6; aikṣavādi 3 and 9; kṛtānna 38), Caraka (often), *Carakatattvadīpikā* (pānīya 37; kṛtānna 9), Dalvaṇa, Ḍalvana or Ḍallana (māṃsādi 1.18; śāka 1.42 and 44; śāka 2.27; lavaṇādi 7, 14, 17; pānīya 23; aikṣavādi 9 and 12; madyādi 1; kṛtānna 54; bhakṣya 4; āhāravidhi 10),⁷⁵⁹ Dhanvantari (dhānya 8), Gayadāsa (dhānya 27–28, 32, 39; māṃsādi 1.22; pānīya 30), Hārīta (māṃsādi 2.34; pānīya 3; kṣīra 46; āhāravidhi 21), Jatūkarna (dhānya 10; māṃsādi 2.34; pānīya 2 and 37), Jejjāla (pānīya 25; kṣīra 37; madyādi 5; kṛtānna 38), Mādhava (dhānya 10; śāka 1.39; kṛtānna 8), Mādhavakara (māṃsādi 2.16), Nala (kṛtānna 48), *Nibandhasaṅgraha* (śāka 1.8, 42, 46; śāka 2.20; lavaṇādi 6),⁷⁶⁰ Parāśara (māṃsādi 2.34), Puruṣottama (phala 15), *Siddhānta* (dhānya 10), Suśruta (often), *tantrāntara* (dhānya 10 and 11), Trivikrama

(mārṇsādi 1.18; śāka 1.44), Vāgbhaṭa (often), Vāpyacandra (mārṇsādi 1.6): Viśvāmitra (dhānya 11; pāṇīya 22; āhāravidhi 22), Vṛddhāvāgbhaṭa (śāka 1.3; pāṇīya 33). G.P. Sharma and P.V. Sharma⁷⁶¹ add to this list: *Haramekhālā*, Kāśīrāja, Svāmīdāsa, and *Yogarātnasamuccaya*.

Śivadāsa's commentary on the *Dravyaguṇa* is quoted in Priyavrat Śarmā's auto-commentary on his *Dravyaguṇasūtra*.

Śivadāsa's contributions to the theory of dravyaguṇa, as contained in this commentary, have been studied by G.P. Sharma and P.V. Sharma.⁷⁶² Important is the view⁷⁶³ that vīrya predominates over rasa and vipāka over vīrya, in contrast to the opinion of Caraka, who arranges these concepts, in relation to their increasing strength, in the order rasa-vipāka-vīrya.⁷⁶⁴ In this respect Śivadāsa follows an earlier authority, quoted anonymously. He also disagrees with the definition of rasa, as given by Cakra, and adheres to the way his father had characterized it.⁷⁶⁵ Suśruta's opinion that taste belongs to water as a mahābhūta and that the six tastes become manifest through mere contact (saṃsarga) with the other bhūtas,⁷⁶⁶ is rejected and replaced by the theory that the tastes are produced through a more specific process of changes (viśiṣṭā pariṇatīḥ) in mixtures of the bhūtas.⁷⁶⁷ An earlier authority is quoted again in support of this. Vīrya is considered to be connected with the essential part (sārabhāga) of the mahābhūtas.⁷⁶⁸ Śivadāsa holds that vipāka comes about by means of a renewed contact with the abdominal fire, after completion of the process of avasthāpāka or prapāka.⁷⁶⁹ He regards the amlavipāka as described by Caraka as included in Suśruta's concept of uṣṇavīrya.⁷⁷⁰

Śivadāsa's descriptions of foodstuffs and drugs, as found in his commentaries on Cakrapāṇi's *Cikitsā* and *Dravyaguṇa*, are valuable in various respects. Sometimes he tries to harmonize apparently conflicting views found in earlier works,⁷⁷¹ sometimes he takes sides.⁷⁷²

Morphological characteristics of medicinal plants, their local names and their habitat are often recorded. In many instances Śivadāsa seems to agree with interpretations offered by Cakrapāṇi or Ḍaḥaṇa while, on the other hand, he was not averse to consulting nighaṇṭus.⁷⁷³

Part 7

Authors and works from A.D. 600–1500

Chapter 1

Authors and works from the period A.D. 600–1000

The *Aṣṭāṅganighaṇṭu*

Contents

The *Aṣṭāṅganighaṇṭu*,¹ a treatise in 408 verses, is, as its name implies, related to Vāgbhaṭa's works. It belongs to Vāhaṭācārya's *Aṣṭāṅgahṛdayasaṃhitā* according to the colophon of one of its MSS,² though its introductory verse states that it is concerned with the drugs mentioned in the *Aṣṭāṅgasamgraha*. Actually, the first part of the work (verses 2–201) describes groups of drugs found in both treatises by Vāgbhaṭa, as is also indicated in one verse of the *Aṣṭāṅganighaṇṭu* itself,³ for it is based on the twenty-five groups of chapter fifteen of the *Sūtrasthāna* of the *Aṣṭāṅgahṛdaya* and chapter sixteen of the same section of the *Aṣṭāṅgasamgraha*,⁴ to which one group has been added, making a total of twenty-six. This extra group, the pippalyādigaṇa,⁵ inserted as number three of the series, is also found in the *Aṣṭāṅgasamgraha*, but at the end, in prose, and worded quite differently.⁶ The *vīratarādigaṇa* (103–112), on the other hand, has been taken from the *Aṣṭāṅgahṛdaya*, not from the *Aṣṭāṅgasamgraha*, where the names of the drugs composing it are different.

The *Aṣṭāṅganighaṇṭu*, after quoting one of Vāgbhaṭa's gaṇas, proceeds with a string of synonyms of each of the drugs composing the group. A significant feature is that the author coined new synonyms for each of these drugs, in order to arrive at a clear characterization.⁷ In a few cases a member of a gaṇa has been suppressed.⁸

This first section of the work is followed by a second, heterogeneous one, called *viprakīṛṇa*, about various medicinal plants, vegetables and fruits (203–286), inorganic substances (287–311ab), poisons (311cd–312), aquatic plants (313–317ab), flowers (317cd–322), liquids, dairy produce, products of the sugarcane, and oils (323–328ab), fermented drinks (328cd–332ab), cow's urine and cow dung (332cd), cereals, pulse and sesamum (333–340), technical terms denoting groups of drugs, such as *triphalā*, etc. (341–342), names for 'drug' (343ab), animals (343cd–372), the *dhātus* and *doṣas* (373–378ab), various terms (378cd–379), the earth, sun, planets and some related terms (380–391ab), deities (391cd–400), terms relating to plants (401–404), and terms relating to medicine in general (405–406). The treatise ends with two verses dedicated to *Dhanvantari* and the *Asvins*.

The *Aṣṭāṅganighaṇṭu* is quoted in *Priyavrat Śarmā's* auto-commentary on the *Dravyaguṇasūtra*.

The *Aṣṭāṅganighaṇṭu* may be compared for its structure and contents with the *Abhidhānamāñjarī* and *Paryāyaratnamālā*.

Special feature

The *Aṣṭāṅganighaṇṭu* is the first work to mention the medicinal plant called *kumārī* (278).⁹

The author

The *Aṣṭāṅganighaṇṭu* is an anonymous work.¹⁰

Date

As the *Aṣṭāṅganighaṇṭu* is based on Vāgbhaṭa's works, it cannot be earlier than the seventh century, which is corroborated by the presence of verses taken from the *Amarakośa*.¹¹ The earliest author to quote from the *Aṣṭāṅganighaṇṭu*, without naming his source, is, according to P.V. Sharma, Indu in his commentary on the *Aṣṭāṅgahrdayasaṃhitā*,¹² which would, if correct, establish that the work was in existence in the latter half of the twelfth century.¹³ Aruṇadatta once quotes an ardhśloka from the *Aṣṭāṅganighaṇṭu*¹⁴ and often gives synonyms to be found in it,¹⁵ which indicates that it was composed before the middle or latter half of the twelfth century.¹⁶ In P.V. Sharma's opinion, Vopadeva (second half thirteenth century) was certainly acquainted with several quotations from it which were current in āyurvedic circles in his time, as appears from his *Hṛdayadīpakānighaṇṭu*, while it was also used by Madanapāla for the composition of his *nighaṇṭu*, completed in A.D. 1375, and by Hemacandra for his *Nighaṇṭuśeṣa* (twelfth century). Finally, P.V. Sharma brings forward that Jejjāta appears to have been acquainted with the *Aṣṭāṅganighaṇṭu*;¹⁷ the corroboration of this assertion would considerably push back the date of the work.

As the material adduced by P.V. Sharma in support of his assertions consists merely of series of synonyms which resemble those found in the *Aṣṭāṅganighaṇṭu* without being identical with them, it is impossible to regard his claims as proved.

Specific developments in the field of materia medica concerning the identity of medicinal plants and their synonyms were put to use by P.V. Sharma as a second type of evidence with a view to determine the date of the *Aṣṭāṅganighaṇṭu*. Though a fruitful approach in itself, the conclusions derived from it remain highly controversial.¹⁸

The third type of evidence adduced by P.V. Sharma consists of some words in the *Aṣṭāṅganighaṇṭu* which may be indicative of its date. These words are *harayoni* (290) as a synonym of *rasendra*, i.e., mercury, *pārvaṭibīja* (290) as a synonym of *abhraka*, i.e., mica, both pointing at a rather developed state of *rasaśāstra*, and *pūti* (299), i.e., civet, which is also found in the *Paryāyaratnamālā* (794) and the *Siddhayoga* (22.79). For the above reasons and in view of the fact that certain drugs introduced in the tenth century or later, such as *akarakarā*, *ahiphenā*, *mastagī* and *rūmī*, as well as *pārasīyayavānī*, which occurs for the first time in the *Siddhayoga*, are absent from the *Aṣṭāṅganighaṇṭu*.¹⁹ P.V. Sharma concludes that the work was written before the ninth century.²⁰ In support of this date he finally tries to demonstrate that Mādhava's *Paryāyaratnamālā*, assigned by him to the ninth century, represents a more developed state of knowledge than the *Aṣṭāṅganighaṇṭu*.²¹ All this evidence, taken together, establishes, in P.V. Sharma's view, that the *Aṣṭāṅganighaṇṭu* was probably composed in the eighth century.²²

This conclusion is too specific to be endorsed. The facts are in favour of placing

the *Aṣṭāṅganighaṇṭu* in about the same period as Vṛnda's *Siddhayoga* and the *Paryā-yaratnamālā* (about A.D. 800–1000).

The *Āśvinīkumārasaṅghitā*

The *Āśvinīkumārasaṅghitā* or *Āśvinīsaṅghitā*,²³ also called *Āśvineyasaṅghitā*,²⁴ has partly been preserved.²⁵

The *Āśvinīkumārasaṅghitā* is quoted in Candrāṭa's *Yogaratanasamuccaya*, Gopā-ladāsa's *Cikitsāmr̥ta*, Trimalla's *Yogatarāṅgiṇī*,²⁶ and in the *Yogaratanākara*.²⁷ Cakrapā-ṇidatta borrowed from it according to Niścāla.²⁸ The *Āśvinīkumāramata* is referred to by Kāśīrāma in his commentary on the *Śārīgadharasaṅghitā*;²⁹ the *Āśvinīmata* is one of the sources of Basava's *Śivatattvaratanākara* and the *Bheṣajakalpasārasaṅgraha*. The *Āśvinīsaṅghitā* is quoted in the *Bheṣajjamañjūsānnaya*, by Niścāla³⁰ and by Bhā-vamiśra.³¹ The *Āśvineya* is quoted in Anantakumāra's *Yogaratanasamuccaya*,³² Dat-tarāma's *Bṛhadrasarājasundara*,³³ Trimalla's *Bṛhadyogatarāṅgiṇī*,³⁴ and the *Vaidya-cintāmaṇi*;³⁵ it is referred to in the *Ratnākaraśadhayogagrantha* and Revaṇasiddha's *Virabhaṭṭīya*. An *Āśvinasaṅghitā* is quoted in Anantakumāra's *Yogaratanasamuccaya*,³⁶ by Bhāvamiśra,³⁷ Candrāṭa,³⁸ Soḍhala, and Śrīdāsapaṇḍita.³⁹ Recipes from the *Āśvinasaṅghitā* occur in Gaṇeśaśarman's *Pākrapaḍīpa*,⁴⁰ Soḍhala's *Gadanigraha*,⁴¹ the *Vaidyacināntāmaṇi*,⁴² Vangasena's *Cikitsāsārasaṅgraha*,⁴³ and the *Yogaratanākara*.⁴⁴ An *Āśvina* was one of the sources of the *Basavarājīya*, *Jvaracikitsita*,⁴⁵ and *Jvarasamuccaya*,⁴⁶ an *Āśvinīya* of the *Basavarājīya*, an *Āśvinīya* of Anantakumāra's *Yogaratanasamuccaya*,⁴⁷ an *Āśvina*- and *Āśvinīyasaṅghitā* of Candrāṭa's *Yogaratanasamuccaya*. Formulae from an *Āśvinīkalpa* occur in the *Basavarājīya* and Vallabheन्द्रa's *Vaidyacināntāmaṇi*. The *Kumārasaṅghitā*, quoted in Anantakumāra's *Yogaratanasamuccaya*, appears to be the same as the *Āśvinīkumārasaṅghitā*.⁴⁸ A *Kumārasaṅghitā*, probably also identical with the *Āśvinīkumārasaṅghitā*, is quoted in the *Bheṣajjamañjūsānnaya*. A work by the *Āśvins* is mentioned as a source by Harṣakīrti.

A *Samnipātakalikā*,⁴⁹ *Samnipāṭalakṣaṇa*,⁵⁰ *Samnipāṭaprakaraṇa*,⁵¹ or *Samnipātārṇava*,⁵² a *Trayodaśasaṅnipātanidānacikitsā*,⁵³ and a *Dhāturatnamālā*,⁵⁴ as well as a *Harītakīkalpa*,⁵⁵ are said to form part of the *Āśvinīkumārasaṅghitā*.

The *Samnipātakalikā* was one of the sources of Kalyāṇa's *Bālatantra*⁵⁶ and is quoted by Meghamuni in his *Meghavinoda*.⁵⁷ An unspecified *Samnipātakalikā* is quoted in Karandīkar's *Nidānādīpikā*.⁵⁸ The *Harītakīkalpa* from the *Āśvinīsaṅghitā* is quoted in Anantakumāra's *Yogaratanasamuccaya*.⁵⁹

A commentary on the *Samnipātārṇava*, entitled *Samnipāṭapadacandrikā*, may have been written by Māṇikyā, son of Padmanābha.⁶⁰ Hemanidhana or Hemanidhāna,⁶¹ a Jain monk of the Kharataragaccha, who probably lived in Bikaner, wrote a commentary on the *Samnipāṭakalikā* in A.D. 1676/77.⁶² A Hindi commentary (stabaka) by Rāmavijaya Upādhyāya, also a Jain monk of the Kharataragaccha, dates from 1774/75.⁶³

An *Āśvinīnighaṇṭu* is quoted in the *Basavarājīya*.⁶⁴ A *Nāḍīnidāna*, *nirṇaya* or *-parīkṣā*,⁶⁵ as well as a *Yogasāra*,⁶⁶ are ascribed to the *Āśvins*. Several formulae are attributed to them.⁶⁷

The *Brahmavaivartapurāṇa* credits the *Āśvins* with a *Cikitsāsāra*tantra.⁶⁸ The *Ti-*

betan tradition credits them with two treatises, called *Gces-bsdus*⁶⁹ and *Byan-khog khrims-kyi lun-hod hphro-ba*.⁷⁰

Candranandana

Candranandana was the author of (1) the *Madanādinighaṇṭu*, (2) a commentary, called *Padārthacandrikā*, on the *Aṣṭāṅgaḥṛdayasaṃhitā*,⁷¹ and (3) a collection of glosses (*vr-tti*) on the latter work.⁷²

The Madanādinighaṇṭu

The *Madanādinighaṇṭu*,⁷³ also called *Gaṇanighaṇṭu*,⁷⁴ and sometimes *Oṣadhinighaṇṭu*,⁷⁵ enumerates both names and properties of medicinal substances.⁷⁶ The treatise can be divided into two main parts. The first one, consisting of 592 verses, is arranged in thirty-two sections (*gaṇa*), in agreement with the number of groups of drugs (*gaṇa*) in Vāgbhaṭa's *Aṣṭāṅgaḥṛdayasaṃhitā* (Sū.15).⁷⁷ The second part (*viprakīrṇadravyaprakaraṇa*; about 440 verses) deals with miscellaneous drugs, not mentioned in the preceding sections, and some other subjects.⁷⁸ It is mainly devoted to medicinal plants, but also deals with inorganic substances, fermented fluids, grain and pulse, prepared dishes, animals, terms designating parts of plants, groups of drugs, and anatomical terms. The plan of the work therefore resembles that of other *nighaṇṭus*, also based on the *Aṣṭāṅgaḥṛdayasaṃhitā*, such as the *Aṣṭāṅganighaṇṭu* and the *Abhidhānamāñjarī*. Candranandana follows Vāgbhaṭa in his order of the drugs, but adds strings of synonyms, properties, and actions.⁷⁹

The *Madanādinighaṇṭu* was translated into Tibetan under the title *Sman-dpyad yan-lag brgyad-paḥi sñin-poḥi ḥgrel-pa-las sman-gyi min-gi rnam-grāns*, i.e., *Vaidyakāṣṭhāṅgaḥṛdayavrtter bheṣajānāmasūcī*,⁸⁰ and forms part of the Tanjur.

The *Madanādinighaṇṭu* is quoted by Bhānuji Dīkṣita⁸¹ and Kṣīrasvāmin⁸² in their commentaries on the *Amarakoṣa*, Śivadatta in his auto-commentary on the *Śivakoṣa*,⁸³ and Śrīvallabhagaṇi in his commentary on the *Nighaṇṭuśeṣa*.⁸⁴ Some quotations from a *nighaṇṭu* in Indu's *Śaśilekhā* agree with verses from the *Madanādinighaṇṭu*.⁸⁵

A *Gaṇanighaṇṭu* is quoted in the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratanākara*.⁸⁶

Special features

Candranandana distinguishes rather frequently more than one type of a drug mentioned as a single entity by Vāgbhaṭa; sometimes he adds items to a group. Examples are: the *sthalaja* and *jajaja* varieties of *madhuka* (1.3); *nimba* and *maḥānimba* (1.7–8); a second type of *viśālā* (1.12–13); two varieties of *vidula* (1.26–27);⁸⁷ *dantī* is added to *dahana* (1.31); two types of *elā* (1.63–64); *hareṇu* is added to *elā* (1.66–67); *saṛṣapa* and *raktasarṣapā* (1.68–69); two types of *kumbha* (= *trivṛt*; 2.1–2); two types of *lodhra* (2.19–20); three types of *śigru* (4.19–21); *madhūla* is added to *madhūka* (4.23–24); three types of *dūrva* (6.1–3); *dhanvayāsa* is added to *anantā* (6.5–6); *śvetakāmbojī*⁸⁸ is added to *śvetapākī* (6.16–17); two types of *vidārī* (8.1–2), of *pañcāṅgula* (8.4–5), of *vṛścīva* = *varṣābhū* (8.11–12), and of *gopasutā* (= *śārīvā*; 8.18–19); *lāmajjaka* is added to *uśīra*

(9.1–4); three types of śiśira (= candana; 9.5–7); two types of bāṇa (15.14), darbha (17.7), and tuttha (18.3); kuṭheraka is added to kālamāla (22.7–8).⁸⁹ A few items, added by Candranandana, are absent from the *Aṣṭāṅgahṛdayasaṃhitā*, for example lāmajjaka (9.3). Some names differ slightly from those employed by Vāgbhaṭa.⁹⁰

The section on miscellaneous drugs contains some items which are not found in the *Aṣṭāṅgahṛdayasaṃhitā*, such as ālārikā (p.22), damanaka (p.26),⁹¹ dadhipuṣpī (p.23),⁹² graiṣmī (p.28), kaṇṭakarañja (p.22), śīrīṣikā (p.21), vanakārpāsī (p.21), vārṣikī (p.28), and vāsantī (p.27).

The author

One of the problems connected with Candranandana is whether one or two authors of this name should be distinguished, one who wrote the *Padārthacandrikā*, and another one who composed the *Madanādinighaṇṭu*.⁹³

P.V. Sharma adduced two arguments in favour of this distinction.⁹⁴ First, the maṅgala of the *Padārthacandrikā* is addressed to Viṣṇu, that of the *Madanādinighaṇṭu* to Sarvajña, who is probably the Buddha. This may indeed point to two different authors, but can also be explained by assuming a syncretistic attitude to religion on the part of Candranandana. The second argument is based on a discrepancy in Candranandana's genealogy. The edited Sanskrit text of the *Padārthacandrikā* mentions Kalyāṇa and Vidyā as his parents, whereas Ravinandana or Ratinandana is the name of Candranandana's father in the Tibetan version of this commentary. This argument does not carry conviction, since it appears improbable that Kalyāṇa and Vidyā are the actual names of Candranandana's parents.

The issue whether one or two Candranandanas contributed to the medical literature can be elucidated by comparing the synonyms of medicinal plants, found in the *Madanādinighaṇṭu*, with those mentioned in the *Padārthacandrikā*. It so happens that the synonyms occurring in the latter work are for the greater part one of the first of the strings of names of the former, which suggests that both works are by one and the same author. The Tibetan tradition also regards the commentator and the author of the *nighaṇṭu* as identical.⁹⁵

Candranandana mentions his name at the beginning of the *Padārthacandrikā* and *Madanādinighaṇṭu*.⁹⁶ His father was Ravinandana, as indicated at the beginning of the *Madanādinighaṇṭu* and in the Tibetan version of the *Padārthacandrikā*.⁹⁷ His grandfather was called Mahānandana.⁹⁸ The *Padārthacandrikā* was written at the instance of Śakunadeva.⁹⁹ Candranandana was, according to the Tibetan tradition, a native of Kāśmīr.¹⁰⁰

Date

An important clue to Candranandana's chronological position is the Tibetan translation of the *Padārthacandrikā*, made by Rin-chen bzai-po between A.D. 1013 and 1055.¹⁰¹ A more precise dating would be reached if Candranandana were identical with Candradeva, mentioned in the biography of the Elder G-yu thog-pa,¹⁰² the chief physician of the Tibetan king Khri-sroṅ lde-bcān, who lived in the eighth century. This G-yu thog-pa visited Candradeva on his way to India and received instruction from him. The same

biography relates that G-yu thog-pa met Vairocana, who claimed to have received the *Rgyud-bži* from Candradeva.¹⁰³ The identity of this Candradeva with Candranandana, considered as not impossible by R.E. Emmerick,¹⁰⁴ would place our author in the middle of the eighth century. The same date was suggested by G. Huth.¹⁰⁵ The quotations from Candranandana's works are not helpful in establishing his date, since they are found in authors who are later than Rin-chen bzañ-po.

Candraṭa

Candraṭa,¹⁰⁶ the son of Tīsaṭa, who wrote the *Cikitsākalikā*, composed the following works: (1) a commentary on the *Cikitsākalikā*, (2) *Suśrutapāṭhaśuddhi*, (3) *Yogaratanasamuccaya*, (4) *Yogamuṣṭi*, (5) *Dravyāvalī*, and (6) *Vaidyatṛiṃśaṭīkā*.

(1) Candraṭa's authorship of the commentary on the *Cikitsākalikā*¹⁰⁷ is evident from the opening sentences of the work. It is written in a lucid style and is important for the constitution of the text of the *Cikitsākalikā* and its interpretation. At some places Candraṭa informs us of sources not referred to by Tīsaṭa himself.¹⁰⁸

Many basic āyurvedic concepts are discussed at length in the comments on verse sixteen of the *Cikitsākalikā*.¹⁰⁹ Some new ideas are put forward in this part of the commentary. Candraṭa distinguishes three types of bala (strength): bala (in its restricted sense as physical strength), ojas, and tejas. Sattva is said to be of two types: bhūtva and sahiṣṇutva. The concept of sātmya is elaborately dealt with according to the views of various authorities. Candraṭa himself is of the opinion that sātmya is of eight types. Regarding the concept of vipāka, he agrees with Suśruta in distinguishing two types. Drugs (auśadha) are classified according to the predominance of one or more of the mahābhūtas in them.

The concept of diseases caused by one's karman is elucidated by a long quotation from a work not mentioned by name.¹¹⁰ Differences of opinion between the followers of Caraka (kāyacikitsakāḥ) and Suśruta (śalyatantrakartāraḥ) are noticed.¹¹¹ Details on the preparation of various medicines are frequently given,¹¹² as well as the names of compound formulae.¹¹³ The interpretations of the names of drugs are mostly correct,¹¹⁴ but sometimes doubtful or wrong,¹¹⁵ probably because the identity of a number of medicinal substances had become controversial, or because of insufficient knowledge. Occasionally, a medicinal plant is described and its vernacular name mentioned.¹¹⁶ The term piccata (roga) is employed as a synonym for the eye disease or group of eye diseases usually called pilla.¹¹⁷ Añjanas, to be employed in eye diseases, are divided into three types: guṭikā, rasa and cūrṇa; guṭikā is subdivided into piṇḍa, varti and guṭikā in a restricted sense.¹¹⁸

Authorities quoted or referred to by Candraṭa are: Agniveśa (1; 2), Āstīka (mentioned by Tīsaṭa; 387), the Āśvins (1, 227, 306: mentioned by Tīsaṭa), Ātreya (1; 5), Aupadhenava (1; 145), Aurabhra (1; 2; 145), Bhaṭṭa¹¹⁹ (introductory part of the commentary), Bhela (2: mentioned by Tīsaṭa; 20; 80; 82; 248: mentioned by Tīsaṭa), Bhoja (2: mentioned by Tīsaṭa; 85; 115), Bhṛgu (2: mentioned by Tīsaṭa), Bhṛguja¹²⁰ (375: mentioned by Tīsaṭa), Cakṣuṣyeṇa (2; 16; 80; 81; 85; 283; 303–304;

354–355), Caraka (passim), Dhanvantari (1: mentioned by Tīsaṭa), dhānvantarīyāḥ (2), Haricandra¹²¹ (maṅgala), Hārīta (2: mentioned by Tīsaṭa; 82; 115; 116; 140–142; 173–174; 212–215), Janakātmaja¹²² (347: mentioned by Tīsaṭa), Jatūkarṇa (2), Jejjāta (maṅgala; 161–162; 191–192; 221–222), Kāikāyana (147 and 151: mentioned by Tīsaṭa), Kapilabala (283), Kharanāda (16; 82; 283), Kṛṣṇātreya (85), Kṣārapāni (2; 16; 190; 208–211; 270), Nimi (2), nyāyavidāḥ (16), Parāśara (2: mentioned by Tīsaṭa; 82; 298–302: mentioned by Tīsaṭa), Pauṣkalāvata (1), Puṣkalāvata (2; 145), *Rasavaśeṣika* (16),¹²³ *Siddhasāra* (81),¹²⁴ Sudhīra (maṅgala), Śukra¹²⁵ (383), Suśruta (passim), vaiśeṣikāḥ (16), Tīsaṭa (19; 82; 83–84; 110; 111; 193; 208–211; 212–215; 354–355), Vaitaraṇa (2), vaiyākaraṇāḥ (16), Varuṇa (383),¹²⁶ Videha¹²⁷ (2; 102; 104; 229–231: mentioned by Tīsaṭa; 304: mentioned by Tīsaṭa; 327; 328; 343; 346–347: Janakātmaja in Tīsaṭa's text), Viśvāmītra (361–364), *Vṛddhabhoja* (325), and *Vṛddhavedha* (85).

Noteworthy is the absence of Vāgbhaṭa,¹²⁸ although he is quoted in Candrāṭa's *Yogarātnasamuccaya*.

Candrāṭa's commentary on the *Cikitsākalikā* is quoted in Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana* and Ṭoḍara's *Āyurvedasaukhya*.

(2) The *Suśrutapāṭhaśuddhi*,¹²⁹ a MS of which was described by J. Taylor,¹³⁰ consists of a revision of the *Suśrutasaṃhitā*, made by Candrāṭa after the commentary of Jejjāta, as he indicates himself.¹³¹ The text frequently differs from the printed edition of the *Suśrutasaṃhitā* according to Taylor, whereas A.F.R. Hoernle¹³² notes that it does occasionally, though not very materially, differ from its traditional recension; elsewhere,¹³³ however, the latter remarks that Candrāṭa's revised text deserves a searching examination because it contains additional and spurious verses recorded as such by Ḍalhaṇa. Hoernle's suggestion¹³⁴ of a connection between Candrāṭa and Kārttikakuṇḍa rests on very slender evidence and needs corroboration. P.V. Sharma, being of the opinion that the text of the *Suśrutasaṃhitā* as we have it contains changes and additions by the hand of Candrāṭa,¹³⁵ tried to identify some of the alterations.¹³⁶ However, the description of the India Office MS of the *Suśrutapāṭhaśuddhi* is in contradiction with such a view.

Candrāṭa refers to his *Suśrutapāṭhaśuddhi* and *Yogarātnasamuccaya* at the end of his commentary on the *Cikitsākalikā*, which proves that the commentary is the latest of the three.

A *Pāṭhaśuddhi* and *Mahāpāṭhaśuddhi*, quoted extensively by Anantakumāra,¹³⁷ cannot but designate Candrāṭa's work. A *Pāṭhaśuddhi* is cited in the *Bhesajjamañjū-sāsannaya*.

The quotations from the *Pāṭhaśuddhi* in Anantakumāra's *Yogarātnasamuccaya* sometimes agree, sometimes disagree with the current text of the *Suśrutasaṃhitā*.¹³⁸

Candrāṭa is referred to and extolled in Bālācārya's *Suśrutasāra*, which may mean that the author of this work was acquainted with the *Pāṭhaśuddhi*.

(3) The *Yogarātnasamuccaya*,¹³⁹ written by Candrāṭa, son of Tīsaṭa, according to its first two verses,¹⁴⁰ is a collection of prescriptions,¹⁴¹ arranged in eight sections (*adhikāra*):¹⁴² *ghṛta*,¹⁴³ *taila*, *cūrṇa*, *guṭikā*, *avaleha*, *gadaśānti*,¹⁴⁴ (*pañca*)*karman*, and *kalpa*.¹⁴⁵

The kalpa section describes nineteen kalpas: amlavetasa-, suvarṇa-, citraka-, kā-kamācī-, śatāvārī-, bhallātaka-, haritākī-, triphalā-, laṣuṇa-, guḍūcī-, śilājātu-, guggu-lu-, vārāhī-, kukkuṭī-, eraṇḍatāila-, kuṛikuma-, gokṣura-, and alambuṣākalpa.¹⁴⁶

The work is of great value because it gives the source of its recipes. These sources are, according to P.K. Gode,¹⁴⁷ who first listed them: Agastya, Agniveśa, Amitaprabha,¹⁴⁸ *Amṛtamālā*, *Āryasamuccaya*, *Aśvinasamhitā*,¹⁴⁹ *Aśvinīkumārasamhi-tā*, *Aśvinīyasamhitā*, Bhadrāsena,¹⁵⁰ Bhadravartman,¹⁵¹ Bhāradvāja, Bheḍa,¹⁵² *Bhīṣanmuṣṭi*, Bindusāra, Cakṣuṣyeṇa,¹⁵³ Caraka, *Cikitsākalikā*, *Dravyavali*, Hārīta,¹⁵⁴ Jātūkarṇa, Kāṅkāyana, Kharanāda, Kṛṣṇātreya, Kṣārapāṇi, *Nāvanītika*,¹⁵⁵ Parāśara,¹⁵⁶ *Śaivasiddhānta*, Śaunaka, *Siddhasāra*,¹⁵⁷ *Śivasiddhānta*, Suśruta, Tīsaṭa, Vāgbhaṭa, Vāhaḍa, Vaitaraṇa, Videha,¹⁵⁸ *Vṛddhavāhaḍa*, *Vṛddhavidēha*, *Yogarātnasamuccaya*, and *Yogayukti*.

D.Ch. Bhattacharyya¹⁵⁹ added the following names: Ātreya, *Carakottaratāntra*, *Cikitsāsamuccaya*,¹⁶⁰ Gopura, Ravigupta, and *Vṛddhasuśruta*;¹⁶¹ absent from his list are: Agastya, Bhāradvāja, Bhadrāsena, Kāṅkāyana, *Śaivasiddhānta*, Vāhaḍa, Vaitaraṇa, and *Yogarātnasamuccaya*.

R.P. Bhatnagar and P.V. Sharma¹⁶² added some more names: Acyuta,¹⁶³ Amṛta-kumbha,¹⁶⁴ Amṛtaprabha or -prabhā,¹⁶⁵ Aupadhenava, Bhāluki, *Cikitsāsāra*, *Cikitsā-tīśaya*,¹⁶⁶ *Dhānvantara*, Dhanvantari, Kālapāda,¹⁶⁷ *Mahendrakalpa*, Nāgārjuna,¹⁶⁸ Ru-drasena,¹⁶⁹ Śālihotra, and Vaṅgadatta; absent from this list are:¹⁷⁰ Agastya, Bhadrā-sena, *Śaivasiddhānta*, *Śivasiddhānta*, Tīsaṭa, Vaitaraṇa, and *Yogarātnasamuccaya*.

Nīścala mentions the *Svalpavāgbhaṭa* as one of Candrāṭa's sources;¹⁷¹ he also re-produces recipes which Candrāṭa took from some unspecified treatise (tantrāntara).¹⁷² Anantakumāra's quotations show that Candrāṭa borrowed from the *Īśānayoga*,¹⁷³ *Mahodadhī*,¹⁷⁴ and *Śacimata*.¹⁷⁵ Anantakumāra also quotes a recipe derived from Candrāṭa that was written on a stone pillar (śilāstambha) by the Yavanas.¹⁷⁶

The *Yogarātnasamuccaya* is the same as the *Candrāṭasamgraha*, quoted by Nīścala; it may also be identical with the *Candrāṭasāroddhāra*,¹⁷⁷ usually separately listed.¹⁷⁸

Candrāṭa's collection of formulae was well known in former ages, for it is re-peatedly quoted by Nīścala.¹⁷⁹ Soḍhala was inspired by it when he composed his *Gadanīgraha*.¹⁸⁰ The work was one of the sources of Cakrapāṇidatta's *Cikitsāsam-graha*.¹⁸¹ It is also one of the sources of Dattarāma's *Bṛhadrasarājāsundara*,¹⁸² the *Bhāratabhaiṣajyaratnākara*, and the *Rasayogasāgara*.¹⁸³

The work is probably quoted as *Yogarātnasamuccaya*¹⁸⁴ in the *Bhesajjamañjūsā-sannaya* (which refers to Candrāṭa too) and the *Yogarātnākara*. Hemādri's citations from a *Yogarātna* are in all probability from Candrāṭa's work.¹⁸⁵

Anantakumāra's quotations from Candrāṭa¹⁸⁶ are undoubtedly from the *Yogarātna-samuccaya*. Nīścalakara, Śivadāsasena,¹⁸⁷ Śrīdāsapaṇḍita and Śrīkaṇṭhadatta refer to Candrāṭa or quote from him as the author of a therapeutic work which contains a large number of formulae, i.e., the *Yogarātnasamuccaya*. Toḍara quotes a verse on the proper doses of various type of kaṣāya, which may be from the *Yogarātnasamuccaya*.¹⁸⁸

Candrāṭa did not recognize samgrahagrahaṇī as a distinct type of grahaṇī.¹⁸⁹ His readings of Caraka and Suśruta differed occasionally from those accepted by other authors.¹⁹⁰

The works by Candrāṭa called (4) *Yogamuṣṭi*¹⁹¹ and (5) *Dravāyavalī*¹⁹² are recorded by P.V. Sharma;¹⁹³ the (6) *Vaidyatṛiṣaṭīkā* is only mentioned by Th. Aufrecht¹⁹⁴ and in the NCC.¹⁹⁵

Śivadāsaśena quotes from a *Vṛndaṭīkā* by Candrāṭa,¹⁹⁶ which probably means that Candrāṭa wrote a commentary on Vṛnda's *Siddhayoga*.

The author

The only fact known is that Candrāṭa was the son of Tīsaṭa. The first verse of the *Yogarātnasamuccaya* shows that he followed his father's footsteps in being a sun-worshipper.¹⁹⁷

Date

As discussed in the section on the date of Tīsaṭa, the terminus ad quem for the composition of the *Cikitsākalikā* is provided by Niścalakara's statement that Cakrapāṇidatta (about A.D. 1050) utilized Tīsaṭa's work in writing his own therapeutic compendium.¹⁹⁸ The earliest author after Cakrapāṇidatta to quote from Candrāṭa is Śrīkaṇṭhadatta in his *Vyākhyākusumāvalī*.¹⁹⁹ The terminus post quem of Tīsaṭa and Candrāṭa has been deduced from a remark at the beginning of the latter's commentary on the *Cikitsākalikā*, proving that he was acquainted with Haricandra's and Jejjata's commentaries.²⁰⁰ As Jejjata's date is disputed,²⁰¹ it is preferable to depart from another fact in establishing the upper chronological limit. This fact consists of Candrāṭa's quoting the *Siddhasāra*²⁰² and its author, Ravigupta,²⁰³ who lived about A.D. 650. This fixes the period of Tīsaṭa and Candrāṭa between 650 and 1050. If Candrāṭa wrote a commentary on Vṛnda's *Siddhayoga*, as seems to follow from a remark of Śivadāsaśena,²⁰⁴ the dates of Tīsaṭa and Candrāṭa fall within the period 900–1050.²⁰⁵

Govardhana

Govardhana²⁰⁶ was the author of several medical works: (1) a commentary (tīkā) on the *Bṛhattantṛapradīpa*;²⁰⁷ (2) *Karmamālā*, a commentary on the *Yogaśataka*;²⁰⁸ (3) *Kaumudī*;²⁰⁹ (4) *Nyāyasārāvalī*;²¹⁰ (5) *Paribhāṣāvalī*.²¹¹ All these works are quoted in Niścalakara's *Ratnaprabhā*.²¹²

The *Ratnamālā*, quoted by Niścala,²¹³ is also a work of Govardhana according to D.Ch. Bhattacharyya²¹⁴ and P.V. Sharma.²¹⁵

Some add to Govardhana's works the *Cikitsāleśa* and *Rogapradīpa*.²¹⁶

An unspecified work of a Govardhana is quoted in Gopāladāsa's *Cikitsāmr̥ta*.

Govardhana is later than Amitaprabhā²¹⁷ and the Mādhava who wrote the *Yogavyākhyā*.²¹⁸ D.Ch. Bhattacharyya²¹⁹ supposed Govardhana to be later than Vṛnda and to be a contemporary of Cakrapāṇidatta.²²⁰ Some clues in Niścala's *Ratnaprabhā* may point to Govardhana as an author who is later than Ravigupta, Jejjata, Īśvarasena, Īśāna, and Gadādhara, but earlier than Mādhava, Cakrapāṇidatta and Bakula.²²¹

Govardhana is reported to be a son of Cakrapāṇi.²²²

The *Jivakapustaka*

The *Jivakapustaka* is a collection of prescriptions, preserved in Sanskrit and in a Khotanese version.

The manuscript of the *Jivakapustaka*²²³ contains three separate tracts,²²⁴ which means that it is a typical 'Sammelhandschrift'. Each tract begins with the word *siddham* (success). As neither a title nor a colophon are extant, and as the text has not been traced elsewhere, the convenient label *Jivakapustaka* has been assigned to it.²²⁵

Contents

The treatise²²⁶ contains a series of prescriptions, many of which have separate names, together with indications on their use. It begins as an exposition of the Bhagavant to Jivaka, who is called 'the king of physicians' in the Khotanese version. The Sanskrit text is mainly in śloka and so corrupt that it can hardly be read. The Khotanese translation, based on this corrupt Sanskrit text that was hardly intelligible to the one who rendered it into Khotanese,²²⁷ is also metrical and is enlarged with regard to the Sanskrit original; it enumerates all the items of comprehensive Sanskrit terms like *daśamūla*, etc., and gives detailed instructions on the way the medicines should be prepared. Its most striking feature is the insistence on specifying in each instance the appropriate quantity of each drug and the amount of milk, water or oil required, also when those items are not found in the original Sanskrit. For this purpose a great variety of terms of measure is used.²²⁸

The prescriptions are divided into four sections, containing prescriptions for an agada, ghees (ghṛta),²²⁹ oils (taila) and powders (cūrṇa). J. Filliozat identified some of the formulae;²³⁰ later, many more could be traced by R.E. Emmerick.²³¹

Date

One of the clues to the chronological position of the *Jivakapustaka* consists of the fact that several formulae were borrowed from the *Siddhasāra*,²³² which makes it clear that it is later in date, probably considerably later, than the latter.²³³

The MS of the *Jivakapustaka* cannot be dated precisely. No detailed palaeographical study of the cursive Brāhmī script as used in Central Asia has yet been made. The language of the Khotanese version is 'late Khotanese'. All that can be said from the point of view of the language is that the text must have been written before the year A.D. 1000, after which no Khotanese was written.²³⁴

The *Jvarasamuccaya*

The *Jvarasamuccaya*²³⁵ is an anonymous monograph on fevers, dating from the tenth century.²³⁶

Authorities and works quoted are *Āśvina*, *Bhāradvāja*, *Bheḍa*, *Bhoja*, *Caraka*, *Hārīta*, *Jatūkarna*, *Kapilabala*, *Kaśyapa*, and *Suśruta*.²³⁷ The quotations from *Kaśyapa* often agree with the text of the *Kāśyapasaṃhitā*.²³⁸ Parts of the long citation from the *Bhālukitantra*, occurring in the *Madhukośa* on the *Mādhavanidāna*,²³⁹ recur, with variants,

in the *Jvarasamuccaya*, where they are attributed to Kaśyapa.²⁴⁰

The *Kriyākālaguṇottaratantra*

The *Kriyākālaguṇottaratantra*²⁴¹ is a Tantric text bearing upon medicine. It is in the form of a dialogue between Śiva and Kārtikeya. The latter puts questions to his father Śiva, wanting instruction about gāruḍamantras against poison, the characteristics of serpents and of demons, especially those who attack children, about embryology, and other subjects. The work is divided into three kalpas, named after the deities Krodheśvara, Aghora, and Jvareśvara.²⁴²

This Tantra dates from before the eleventh century, because Kṣemarāja, the pupil of Abhinavagupta, quotes it several times in his commentary, called *Netroddyota*, on the *Netratanttra*.²⁴³ One of its MSS dates from 1184.²⁴⁴

The *Kriyākālaguṇottara* is quoted in the *Paraśurāmapratāpa*²⁴⁵ and the *Śiśurakṣā-ratna*. It was one of the sources of Nāgārjuna's *Kakṣapuṭa* and is mentioned in the Mantrakhaṇḍa of Nityanātha's *Rasaratnākara*.

The *Laṅkāvatāra*

A treatise called *Laṅkāvatāra* is said to be a Tantric work on medicine. One of the MSS dates from A.D. 908.²⁴⁶

The *Paryāyaratnamālā* by Mādhava Bhiṣaj or Mādhavakāra

The *Paryāyaratnamālā*²⁴⁷ or *Ratnamālā*²⁴⁸ is a lexicon, written by Mādhava Bhiṣaj²⁴⁹ or Mādhavakāra.²⁵⁰

Contents

The text of the *Ratnamālā* consists of about 1,300 ardhāślokas, but the edition numbers them from one to 1758 in the following way: ardhāślokas 1–578, pādas 579–1424, ardhapādas 1425–1472, ardhāślokas 1473–1758.

The treatise is primarily a nighaṇṭu, and, though it goes beyond the limits of medical terminology, the author wrote it for the sake of physicians, as appears from one of his introductory verses: “What can a valiant man do in a battle if he has no weapons? With regard to therapy the same holds true for a physician who has no (knowledge of) synonyms”.

The *Ratnamālā* consists, apart from six introductory (1–12) and two concluding verses (1755–1758), of a synonymous (13–1472) and a homonymous section²⁵¹ (1474–1640), followed by a section containing definitions (1642–1754). The contents are summarily listed in ardhāślokas 9–12. The synonyms are dealt with first in ślokas (13–216) and ardhāślokas (218–578), followed by pādas (580–1424) and ardhapādas (1425–1472). The synonyms are usually given separately, in the nominative, without making much use of dvandvas and ekaśeṣas. The names of plants, animals, inorganic substances, articles of food, etc. (13–854), are accompanied by

their vernacular counterparts. The homonyms are divided into apyarthas (words with a single additional meaning each, given in the locative and indicated by the particle *api*), dvyyarthas (words with two meanings) and bahvarthas (words with more than two meanings), distributed as follows: apyarthas (one apyārtha in one pāda) (1474–1504), dvyyarthas (one dvyyārtha in one pāda) (1505–1554), dyvarthas (one dvyyārtha in one ardhāśloka) (1555–1586), and bahvarthas (1587–1640). The bahvarthas have from three to eight meanings and are arranged in such a way that the number of acceptations increases. The section dealing with definitions covers dietary articles (1642–1686), paribhāṣā (technical rules; 1687–1735), and māna (weights and measures; 1737–1754). The junctions between the various parts are indicated in the text itself (217; 579; 1473; 1641).

The synonymous section is concerned with medicinal plants (13–188), followed by a heterogeneous series of terms (189–217) and medicinal plants again (218–421). The work proceeds with minerals and metals (422–445), salts and caustic substances (446–451), sugar and related articles (452–455), medicinal substances (456–480), dairy produce (481–486), cow dung (487), names of animals (488–508), human beings and related terms (509–539), various terms (540–561), deities and other non-human beings (562–574), religious terms (575–578), medicinal substances and some medical terms (580–734), animals (739–822), various terms (823–828), cows and products of the cow (839–848), cereal products (849–862), medical terms (863–876), anatomical terms (877–944), parts of plants (945–954), various terms (955–1296), the seasons (1297–1302), the lunar mansions (1303–1314), colour adjectives (1315–1330), various terms (1331–1388), names of diseases (1389–1424), and various terms (1425–1472).

Special features

Many rare words are found in Mādhava's *Ratnamālā*. The group of medicinal plants called aṣṭavarga is mentioned (3.43–44).²⁵² Unusual names of plants are: āśīta(ka) (651);²⁵³ aśokaroḥiṇī (352);²⁵⁴ aṣṭapādikā (311);²⁵⁵ asthisamhāra (389);²⁵⁶ cela (712);²⁵⁷ coraśuṇṭhī (295);²⁵⁸ dhustūraka (405);²⁵⁹ hastikarṇadala (= hastikarṇapālāśa; 100);²⁶⁰ hīlamocikā (374);²⁶¹ jūrṇā (697);²⁶² kapāṭacakra (416);²⁶³ kāmīraja as a synonym of kuṅkuma (264);²⁶⁴ kulatthikā (= vanakulattha; 420);²⁶⁵ kumbhāṭa (654);²⁶⁶ madhukukkuṭī (152);²⁶⁷ pīṭamudga (694);²⁶⁸ poṭagala (463);²⁶⁹ ṛkṣagandhā (= sarpagandhā; 470);²⁷⁰ sarpākṣī (386);²⁷¹ sudarśanā (363);²⁷² timiraka (= nakharanṇaka; 308);²⁷³ uccaṭā (395).²⁷⁴

Remarkable words are moreover: antragranthi as a synonym of atīśāra (1401);²⁷⁵ bhiṣagjita as a synonym of cikitsā (528), though it usually means auśadha;²⁷⁶ kothaka as a synonym of kukūṇaka (1390); nirvāhin and suvāhikā as names of a disease (1400);²⁷⁷ tarṣabhū as a synonym of kloman (909); vātāṇḍa and vradhna as synonyms of the disease called vṛddhi (1415); yonyarśas as denoting (yoni)kanda (1392).

Mādhava and his *Ratnamālā* are quoted or referred to by Bhānuji Dīkṣita in his *Rāmāśramī* or *Vyākhyāśudhā* on the *Amarakoṣa*, written in the first half of the seventeenth century, probably between A.D. 1620 and 1640;²⁷⁸ Hārṇacandra in his commentary on the *Suśrutasaṃhitā*,²⁷⁹ Haricaraṇasena in his *Paryāyamuktāvalī*,²⁸⁰

Mallinātha in his *Amarapadapārijāta* on the *Amarakoṣa*, dating from the fourteenth century,²⁸¹ Medinikara in his *Nānārthaśabdakoṣa*, written in the thirteenth century, probably between 1200 and 1275,²⁸² Nārāyaṇa Vidyāvinoda in his commentary on the *Amarakoṣa*,²⁸³ Niścalakara,²⁸⁴ Rādhākāntadeva in his *Śabdakalpadruma*,²⁸⁵ Rāyamukutaṃaṇi in his *Padacandrikā* on the *Amarakoṣa*, composed in 1431/32,²⁸⁶ Śivādāsa in his commentary on Cakrapāṇi's *Dravyagūṇa*,²⁸⁷ Śivadatta in the auto-commentary on his *Śivakoṣa*, dating from 1677/78,²⁸⁸ Umeśacandragupta in his *Vaidyakaśabdasindhu*, and Vandyaghaṭṭīya Sarvānanda in his *Ṭikāsarvasva* on the *Amarakoṣa*, written in 1159/60.²⁸⁹ Mādhava's lexicon is said to be quoted several times in Vidyāvinoda Nārāyaṇa's commentary on the *Amarakoṣa*.²⁹⁰

A work called *Ratnamālā* that may be Mādhava's lexicon is quoted by a Kāumudīkara who was one of Rāyamukutaṃaṇi's sources.²⁹¹ The *Ratnamālā* may have been known to Vijayarākṣita who quotes from it without specifying the source;²⁹² Vācaspati's commentary on the *Mādhavanidāna* contains the same quotation, adding that it is taken from the *Abhidhāna*,²⁹³ which indicates that it may be different work, whether earlier or later than the *Ratnamālā*. According to T. Chowdhury's note to his edition of the text, the work is also quoted in Yādavaprakāśa's *Vaijayantī* (eleventh century), Kṣīrasvāmin's commentary on the *Amarakoṣa*, composed in the first half of the twelfth century,²⁹⁴ and the *Dhanvantarīyanighaṇṭu*. A *Nāmanighaṇṭu* by Mādhava, quoted by Devarāja Yajvan in his *Niruktabhāṣya*,²⁹⁵ may be the *Paryāyaratnamālā*.²⁹⁶

The author

Mādhava Bhiṣaj was a son of Indrakara and lived at Śilāhrada. D.Ch. Bhattacharyya has observed²⁹⁷ that Śilāhrada appears to have been a famous place, at a considerable distance from Pāṭaliputra, for it is mentioned in an illustration in Vācaspatimiśra's *Nyāyakaṇikā*:²⁹⁸ "Someone who has obtained a favour at Pāṭaliputra will certainly not remember it without confusion at Śilāhrada". The ancient Śilāhrada has been identified as the modern Pattharghaṭṭā near Bhāgalpur in Bihār, at a certain distance from Patnā, the ancient Pāṭaliputra.²⁹⁹ This Pattharghaṭṭā is the site of the Vikramaśīla university which flourished during the Pāla dynasty.³⁰⁰ The vernacular names of medicinal plants, added to the Sanskrit synonyms of the *Paryāyaratnamālā* in the margin of the text, are in favour of assigning a Bengal origin to the author,³⁰¹ if they indeed derive from him and have not been added later.

Date

Since it is an established fact that Vandyaghaṭṭīya Sarvānanda quotes from the work, the *Ratnamālā* was composed before A.D. 1159/60. If it could be proved that Yādavaprakāśa used it in composing his *Vaijayantī*, it would be earlier than the eleventh century. Internal evidence, consisting of the absence of ahiphena and bhaṅgā, together with their synonyms, points to a period preceding the eleventh century.

Indicative of a date later than about 800 are the following points. Firstly, the presence of gandhaka (435), pārada (719) and abhra (720), as well as pūti and its synonym khaṭṭāsikā (794). Secondly, the occurrence of vātingana (360), often supposed to be of Persian origin, as a synonym of vārtākī, the eggplant, *Solanum melongena* Linn.³⁰²

Thirdly, the presence of the disease called (yoni)kanda (1392), described for the first time in the *Mādhavanidāna*, though the term is used in a different sense in the *Ratnamālā*. The word *vradhna* as a synonym of *vr̥ddhi* (1415) is adduced by P.V. Sharma as indicating that the *Ratnamālā* is posterior to *Vṛnda's Siddhayoga*,³⁰³ but that argument is not compelling because *Vṛnda* (40.20) describes *vardhma* (= *vradhna*) as separate from *vr̥ddhi*, which would rather point to the posteriority of *Vṛnda*. Unconvincing too is P.V. Sharma's claim that the last verse of the *Ratnamālā* imitates a stanza from Māgha's *Śiśupālavadha* (2.112),³⁰⁴ dating from the seventh century. P.V. Sharma's arguments for regarding the *Ratnamālā* as posterior to the *Aṣṭāṅganighaṇṭu* should be regarded as tentative and doubtful.³⁰⁵

Summarizing, it can be said that Mādhava's *Ratnamālā* probably dates from the period 800–1000.³⁰⁶ The earlier view that it was written by the author of the *Mādhavanidāna* should completely be given up.³⁰⁷

Another work called *Paryāyaratnamālā* was written by Maheśvara Mīśra.³⁰⁸

Māhuka or Mādhuka

Māhuka or *Mādhuka* was the author of the *Haramekhalā*,³⁰⁹ a treatise written in Prakrit verse.³¹⁰

Contents

The work, written in āryā metre, has a total of about 1,500 verses.³¹¹ It is arranged in seven chapters (*pariccheda*), in conformity with the seven hoods of the serpent Vāsuki, which form the girdle (*mekhalā*) of Śiva (Hara).³¹² The number of verses of some chapters differs in the editions: chapter one 191 (11+19+6+155 in ed. b); chapter two 103 (edition a) or 101 (edition b);³¹³ chapter three 71 (both editions); chapter four 389 (edition a) or 415 (edition b);³¹⁴ chapter five 281 (edition a).

The *Haramekhalā* deals with a diversity of subjects. The first chapter, called *koūhalāhiāra* (*kautūhalādhikāra*),³¹⁵ opens with a *maṅgala* addressed to Paśupati, nine verses on the author, and a verse explaining the purpose of the book.³¹⁶ A series of nineteen verses follows, introducing the subject of chapter one by giving examples. This subject consists of unusual phenomena giving rise to curiosity and wonder (*kautūhala* or *āścarya*), which are brought about by the power of gems, drugs, and mantras. A series of six verses extols the adroit person who makes a living by producing these phenomena. The remainder of chapter one describes a long series³¹⁷ of methods (*prayoga*) of bringing about these exciting events, which, amongst many other things, consist of recipes to make the mouth beautifully red when chewing betel (21–25), recipes for an ink by means of which one can write a book that may be read in utter darkness (34–35) or which makes letters written on the back of the hand visible on the palm (36), procedures to make *madirā* smell like water (45), to write letters which remain floating on water (47), to make fruits fall down from trees (58–59), and produce objects invisible to the eye (60), procedures that enable a person to swim under water like a fish (100) or to walk on the surface of water (102), etc. The second chapter, called *riujaṇadamāṇa* (*ripujanadamāṇa*; 2.101), is, as its title

indicates, concerned with procedures to be used against enemies.³¹⁸ Chapter three is about subjugation (vaśīkaraṇa).³¹⁹

The fourth and longest (vipula; 4.1) chapter is the most interesting one with regard to medicine and deals with the treatment of diseases, or, to use the term employed by the author, sarīrapariamma (sarīraparikarman), i.e., body care. The order in which the diseases are mentioned is chiefly, though not consistently, based on the division of medicine into eight limbs: śālākya (2–87), kāya and śālya (88–259), bhūtaavidyā (260–265), agada (267–301), kaumārābhṛtya (309–380), rasāyana (385–392), and vājīkaraṇa (393–396). A second and most unusual ordering principle in the sections on śālākya, kāya and śālya is the arrangement of the diseases from top to bottom.

The section on śālākya begins with prescriptions which provide even a bald person with a beautifully curly crop of hair (2–10), and proceeds with formulae against diseases of the head (11–30), amongst which those turning grey hair black again have a prominent place (20–28). Thereafter the following subjects are covered: diseases of the ears (31–41), procedures which increase the size of the earlobes and also that of the penis (42–49), eye diseases (50–66), kāmālā (67–69), diseases of the nose (70–71), and diseases of the mouth (72–87). Then vyaṅga is dealt with (88–92), and prescriptions are given which make the face beautiful like the moon (93–105).

The section on kāya and śālya is concerned with a long series of subjects: gaṇḍamālā (105–109), apabāhuka and diseases of neck and shoulders (110–111), prescriptions which make the female breasts large and firm, increase the size of the earlobes and also that of the male member again (112–119), plīhodara and udara (120–123), abscesses (124), udara (125), kṛmi (126), kuṣṭha and related disorders (127–142), prescriptions which give beauty to the female and male body and remove a bad body odour (143–149), raktapitta, kāmālā and pāṇḍuroga (150–151), pīnasa (152–153), svarabheda (154), cough (155–156), hiccup, shortness of breath and some other disorders (157–159), kṣaya (160–165), śūla (166–168), atisāra, grahaṇī and viṣṭhikā (169–174), prameha (175–176), mūtrakṛcchra (177), aśmarī and śarkarā (178–181), gaṇḍamālā and kuraṇḍa (182), diseases of the male organ (183–185), recipes which activate the digestive fire (199–200), vomiting (201), morbid thirst (202–203), fever (204–220), recipes which cause insomnia or cure it (221–225), ūrustambha (226–229), fractures (230), diseases of the feet (231–234), maśa (235–237), burns (238–239), śvayathu (provoked by the fruits of bhallātaka, i.e., *Semecarpus anacardium* Linn.f.; 240), vraṇa (241–249), naṣṭaśālya (250–251), fistulas (252–254), raktamaṇḍala (255), arbuda, granthi and gaṇḍamālā (256–259).

The section on bhūtaavidyā is about apasmāra (269), bhūtas and grahas (261–265). A prescription against cātūrthaka (266) is loosely inserted. The section on agada is concerned with the poisons of many animals and some poisons of a different origin (e.g., kodrava and dhattūraka, 276; pūgaphala, 277–278). It is followed by prescriptions against piṭākā (302–303), jvālāgardabha (304) and śītalikā (305–308).

The section on kaumārābhṛtya deals with pradara (309–314), raktagulma and amenorrhoea (315–316), recipes which assure the birth of a son (317–318), promote pregnancy (319–321) or prevent it (322–324), prevent miscarriage (325–328) and bleeding during pregnancy (329); it contains a prescription against pain after an

abortion (330), prescriptions assuring an easy delivery and separation of the afterbirth (331–340); it deals with *yonisūla* (341–344), the promotion of milk secretion (345–346), diseases of the breasts (346–347), *kikkisika*, i.e., *striae* (349), *yonivibhramśa* (350–351), prescriptions which make the female organs attractive (352–353, 355–358) and devoid of hair (359–361), and the restoration of virginity after intercourse (354). It ends with verses on the protection of children against *grahas* (362–367), with recipes against children's diseases (368–374), and recipes which assure that children grow up happily and in good shape (375–380).

The section on *rasāyana* and *vājīkaraṇa* covers the usual subjects. The chapter ends with the treatment of some disorders occurring in cows, buffaloes and mules (398–413), and, finally, a verse on a procedure which controls the colour of the feathers of newly hatched doves (414).

Verses 183–206 of this chapter are absent from edition a and replaced there by a text in verse and prose called *Puttalikā pañcaviṃśatikā*, concerned with harming enemies by means of magical procedures against their effigy (*puttalikā*).

Chapter five³²⁰ is concerned with the making of fragrant compounds and consists, according to the author himself (5.1), of an extract from various extensive works on the subject (*gandhaśāstra*).³²¹ It deals with³²² *ambuvāsanavidhi* (the preparation of perfumed water; 3–8), *dantakāṣṭhavidhi* (toothbrushes; 9–11), *kavala* (water for rinsing the mouth; 12), *madhūcchiṣṭavidhi* (beeswax applied to the lips; 13–14), *netraparikarmāñjana* (collyria; 15), *mukhavāsa* (perfumed water to scent the breath; 16–32), *(sugandha)taila* (fragrant oils; 33–58), *udvartanasaṃvidhi* (fragrant unguents used in rubbing the body; 59–61), *snānakriyā* (62–69) and *snānopakaraṇa* (70–85) (fragrant substances used during and after bathing), *paṭavāsa* (fragrant powders used for perfuming clothes, etc.; 86–87), *dhūpa* (88–109) and *dīpavartī* (110–120) (various forms of incense), *sugandhasaṃvidhi* (perfumes used as ointments; 121–158), various fragrant substances (159–192), substitutes (*pratinidhi*) for rare and expensive natural perfumes (*kastūrikākṛti*; 193–195), *āsava* (*vidhi*) (fragrant substances made by means of fermentation; 196–210), substitutes for rare and expensive natural perfumes: *karpūrakṛti* (211–213), *kuṅkumakṛti* (249–256), *karpūratailakṛti* (257–263), *lavaṅgakṛti* (264), *elāṅkṛti* (265), and *kuṣṭhakṛti* (266), *sahakāra* preparations (267–269), and, finally, *puṣpadrāvaṇayukti* (the extraction of essential oils from flowers, such as *mallikā*, *campaka* and *ketakī*; 270–272).³²³

Then follows, after an introductory verse (274), a *nighaṇṭu*, which gives, not in verse but in simple enumerations, synonyms of Prakrit terms, together with their Sanskrit counterparts.

Most of these words are names of plants which occur in the verses of the *Haramekhalā*, but they are preceded by names of gods, anatomical terms and names of animals, and followed by technical terms. The chapter ends with some verses on the utility of the *Haramekhalā* and its *nighaṇṭu* (275–277), its author (280), and the date of its composition (281). One of these concluding verses (278) indicates that the end of the treatise has been reached. Nevertheless a sixth and seventh chapter are known to exist. Chapter six is about arboriculture (*pādapaparikarman*) and food (*āhāra* *vidhi*).³²⁴ Chapter seven deals with inorganic substances (minerals, salts, gems,

and metals).³²⁵

The *Haramekhalā* is quoted by Basava in his *Śivatattvaratnākara*, by Kṣīrasva-min,³²⁶ Niścalakara,³²⁷ in the *Paraśurāmapratāpa*, by Nityanātha in the *Rasaratnākara*,³²⁸ Śivadāsasena,³²⁹ Śrīkaṇṭhadatta in the *Kusumāvalī*,³³⁰ Śrīvallabhagaṇi in his commentary on Hemacandra's *Nighaṇṭuśeṣa*,³³¹ and Ṭoḍara. It is referred to by Kokkoka in his *Ratirahasya*,³³² by Nityanātha³³³ and Śrīdāsapaṇḍita. Cakrapāṇidatta may have derived some formulae from it.³³⁴ The *Kakṣapuṭa* mentions the *Haramekhalā* as one of its main sources.³³⁵ The *Kāmaratna* contains a recipe said to derive from the author of the *Haramekhalā*.

A *Śivamekhalā*,³³⁶ quoted by Ṭoḍara,³³⁷ is probably the same as the *Haramekhalā*.

Special features

Noteworthy terms and features of the *Haramekhalā* and its commentary in the field of nosology are: jhiṇi jhiṇiā (jhiṇi jhiṇikā; 12.15),³³⁸ a disorder explained as suptapādātā (numb feet); the use of the term lūā (lūtā; 2.19–20), probably in the sense of inflamed sore; uppiāsa (4.11), explained as a synonym of the disease called dāruṇa, characterized by tvakcaṭana, i.e., cracking of the skin; dāruṇa (dāruṇaka; 4.13) is said to be a disease of the skin of the head and to be the same as uppiāsa; arūsiā (arūṇṣikā; 4.16) is said to consist of small pustules; the description of head lice (4.18); pūiroa (pūitroga; 4.35), the same as kaṇṇasrāva; aṇṇanaguliā (aṇṇanagulikā; 4.66) as a synonym of an eye disease called aṇṇanapiṭakā; khuṇkhuṇaṣṣoṇiā (4.70) as designating a nosebleed (nāsikāsira-ṣoṇita); avvaradigubbhavaghuṇadantaā (aparadigudbhavaghuṇadantaka; 4.86); gaṇḍāpacī as a synonym of gaṇḍamālā (4.105); caraṇadaddu (caraṇadadru; 4.129), a disease of the skin of the feet; khasarāi (khasarāṇi; 4.130) as a skin disease; dubbhita (durbhita; 4.140) as a synonym of sidhma; rāāmānda (rājamānda; 4.161) as a synonym of rā-jayakṣman, also called nṛpavyādhi; the presence of pariṇāmaśūla (4.166); a variety of śarkarā, called attaṇḍasakkara (atyāṇḍasarkarā; 4.180–181); galagaṇḍa as a synonym of gaṇḍamālāpacī (4.182); the term kuraṇḍa (4.186–188), used to designate a swelling of one or both testicles (aṇḍa- or vṛṣṇavṛddhi); rārṇaṇiṇvāa (raṇḥaṇiṇvāta; 4.228–229) as a synonym of ūrustambha;³³⁹ a disease of the skin of the legs called rattamaṇḍala (raktamaṇḍala; 4.255); the description of keloid, vaṇakiṇagaṇṭhī (vaṇakiṇagranthi; 4.259); a disease of the skin called kīṭapiḍaā (kīṭapiḍakā; 4.302); the mention of jvālā-gardabha and jālagardabha as synonyms (4.304); the presence of śīaliā (śīalikā; 4.305–306), put on a par with visphoṭa; the mention of an epidemic form (upasarga ja) of this disease (4.306); mahāruhira (mahārudhira; 4.310–311) and atirajas (4.310 and 312) as synonyms of pradara; a disease of the female breasts called ṭhaṇakīkaḍa (stanakīkaṭa; 4.346); the description of varaṇḍavibbhaṇṣa (varāṇḍavibbhaṇṣa; 4.350), probably to be equated with prolapsus uteri; a children's disease called vacchāruka (vatsārūṇṣi; 4.373), characterized by the presence of parasites in the lesions on the head; khuṇkhu-ṇiā (khuṇkhuṇikā; 4.374) as a synonym of kukkūṇaka; a children's disease called mutthai (mustakī; 4.374), in which small pustules arise on the interior of the eyelids; a disease of horses and mules called variphōḍa (vārisphoṭa; 4.411), characterized by blisters.

These peculiarities show that Māhuka has not been influenced by the *Mādhavani-*

dāna; the order of the diseases of that work has not been adopted, and the new disorders, described for the first time by Mādhava, are absent, with the exception of *pariṇāmaśūla* (4.166).

Māhuka's therapeutical prescriptions are partly of a magical nature. Enlargement of the spleen, for example, is treated by throwing away, as far as possible, the root of *indravāruṇī*, divided into two halves, while pronouncing the name of the patient (4.121).³⁴⁰ Products of animal origin are repeatedly used,³⁴¹ as well as mercury.³⁴² Opium is absent.

Yavanas are referred to as experts in the art of perfumery (5.58).³⁴³ The Tantric Buddhist deity *Kurukullā* is mentioned in the introductory verses.³⁴⁴

The *Haramekhalā* contains many interesting or rare names of plants and animals, both in its prayogas and its *nighaṇṭu*. Some noteworthy names of plants are: *āpalī* (4.252);³⁴⁵ *cakrāṅkā* (= *sudarśanā*; 1.69; 4.124);³⁴⁶ *caṇḍālikā* (= *raktakañcukā*; 3.39);³⁴⁷ *gomaya* (5.234);³⁴⁸ *gorambhā* (3.9; 4.400);³⁴⁹ *gr̥hakumārī* (4.233);³⁵⁰ *jhiṇṭuka* (= *gopālaka*; 1.105);³⁵¹ *jhiṇṭuka* (= *gopālapīṭhaka*; 1.65 and 68);³⁵² *kacchodbhava* (= *guggulu*; 4.189); *kanakatvac* (4.96);³⁵³ *kandalī* (3.27);³⁵⁴ *kaṇṭakakarañja* (5.159);³⁵⁵ *karabhavāruṇī* (3.63);³⁵⁶ *kāravallī* (4.54);³⁵⁷ *kirimāla* (= *āragvadha*; 4.148);³⁵⁸ *kuḍuhuñcī* (4.71);³⁵⁹ *kukkuramardaka* (= *rāmaśītalika*; 4.346);³⁶⁰ *kuliśataru* (= *sudhāvṛkṣa*; 2.68);³⁶¹ *mayālī* (= *potikā*; 1.99);³⁶² *māyāphala* (4.352);³⁶³ *mohanī* (3.9);³⁶⁴ *nihuduṅḡī* (= *sudhāvṛkṣa*; 2.64);³⁶⁵ *paraśucchinna(ka)* (1.5; 5.271);³⁶⁶ *suvarṇatvac* (4.93);³⁶⁷ *tāmrāsthikā* (= *rāṅgiṭṭikā*; 1.23);³⁶⁸ *uṣṭravāruṇī* (3.53);³⁶⁹ *uttaṇṭakī* (4.257);³⁷⁰ *uttaraṇī* (= *uṣṭravāruṇī*; 4.338); *valla* (= *nispāva*; 4.109);³⁷¹ *vāluṅka* (1.26 and 33);³⁷² *vanadrākṣā* (= *goṣṭhāmlikā*; 4.234);³⁷³ *vanakumārī* (4.248);³⁷⁴ *varāhakaraṇī* (4.84);³⁷⁵ *vatsakarkaṭikā* (= *gopālakarkaṭikā*; 4.179).³⁷⁶

The author

Māhuka, who mentions his name at the beginning³⁷⁷ of his treatise and again at the end of chapter five,³⁷⁸ states that he is a descendent of the great poet Māgha,³⁷⁹ a grandson of Kavimaṇḍana,³⁸⁰ a son of Mādhava,³⁸¹ and a pupil of *Durjayabhṭa*³⁸² of the lineage of Śrīmūladeva.³⁸³ The latter performed miracles at *Virajānagara*³⁸⁴ during the reign of *Unmattakeśarin*,³⁸⁵ during the reign of *Vallabhanarendra*,³⁸⁶ and at *Citrakūṭa* during the reign of *Jayavarāha*.³⁸⁷ Māhuka himself was a resident of *Bhillamālapura*³⁸⁸ and wrote his *Haramekhalā* at *Citrakūṭa*³⁸⁹ during the reign of *Dharaṇīvarāha*.³⁹⁰

The author was a Śaiva, as appears from the *maṅgalācaraṇa*, dedicated to *Paśupati*, and other references.³⁹¹

Date

The *Haramekhalā* was completed on the seventh day of *Māgha* of the year 887 of an unspecified era,³⁹² said to be the *Vikrama* era by the commentator, i.e., A.D. 829/830. This date was accepted by the editors of the two editions of the text, but rejected by D.Ch. Bhattacharyya.³⁹³ According to the latter, no king, called *Dharaṇīvarāha*, reigned in the region of *Citrakūṭa* (i.e., *Chitor*) about 830. Two kings of this name are known; one of these, a *Dharaṇīvarāha* of the *Cāpa* family, ruled in *Vardhamāna* (modern *Wadhvān* in *Kāthiāwār*), and the other, a *Paramāra* prince, in *Candrāvati* and

Arbuda (near Chitor) in 1002. Since Wadhan is a long distance from Chitor, D.Ch. Bhattacharyya assumes that the Paramāra king was Māhuka's patron and that the *Haramekhalā* was composed in 887 of the Śaka era, i.e., 965/966. In his view, this date is corroborated by Māhuka's reference to Māgha as a distant forefather. A.N. Upadhye³⁹⁴ also argued that the Śaka era may be preferable, but he prefers to identify the patron as Dharaṇīvarāha, the Cāpamahāsantādhipati, who was a feudatory of Rājādhirāja Mahipāla I of the Gurjara-Pratihāra dynasty of Kanauj.³⁹⁵ It is not yet possible to decide which view should be preferred.

The terminus ad quem of the *Haramekhalā* can be established as the eleventh century, because the work was put to use by Cakrapāṇidatta in the eleventh century and was quoted by Kṣīrasvāmin in the first half of the twelfth century.

Another medical treatise by an unknown author and of unknown date, called *Haramekhalātantra*, has summarily been described by P.V. Sharma.³⁹⁶ It is completely different from Māhuka's work and referred to by the author as a mahauśadhisamuccaya.

The commentary on the *Haramekhalā*, written by an anonymous author, gives a Sanskrit chāyā of the Prakrit verses and explanations in Sanskrit. It is not only valuable with regard to information on plants, animals,³⁹⁷ etc., but also in providing detailed instructions on the preparation of medicines and perfumes, and in specifying the diseases mentioned in the text. Quotations are rare; the definitions of pāmā (4.136),³⁹⁸ jvālāgardabha (4.304)³⁹⁹ and kukkūṇaka (4.374)⁴⁰⁰ are quoted from an unnamed source, as well as the definition of the maximum length of life (paramāyus) in man and various animals (4.389),⁴⁰¹ the rules for cleansing the teeth (dantadhāvanavidhi; 5.11), and the definition of a gaṇḍūṣa and a kavala (5.12). In one case only the author names his source, namely Vāgbhaṭa (4.204).⁴⁰² He also summarizes in some verses at the end the topics dealt with in chapter four,⁴⁰³ and gives, in a series of about thirty verses at the end of chapter five, technical rules (paribhāṣā) for preparing the substances prescribed by Māhuka.

The maṅgala of the commentary indicates that its author was a Śaiva. That he was not the first commentator on the *Haramekhalā* is evident from a remark referring to predecessors.⁴⁰⁴ The date of the commentary cannot be established.

The *Jīvasūtra* attributed to Nāgārjuna

The *Jīvasūtra* is attributed to Nāgārjuna.⁴⁰⁵ This work, consisting of 205 verses, deals with the following subjects: the objective of the treatise (6–8); the three doṣas (ñes-pa): vāyu (rluñ), pitta (mkhris) and kapha (bad-kan), which arise from kāma (ḥdod), krodha (khro) and moha (gti-mug) respectively (9); the importance of the body (lus), place of residence (yul) and time (dus), i.e., the seasons, etc., for leading a happy life (10–12); the bodily constitutions (lus; 13–16); the predominance of the doṣas in the three stages of life (17); the predominance of the doṣas in various types of country (yul; 18–19); the relationships between the doṣas and the parts of day and night (20–21); their relationships with the seasons (22–24); the six tastes (ro) and their connections with the

doṣas (25–41); the relationships of the tastes with the guṇas (yon-tan; 42–45); sātmya and asātmya (hphrod and mi hphrod; 46–53); the regimen during the seasons (54–101); rules for the promotion of longevity (102–133); the non-suppression of natural urges (134–135); rules for the preservation of health (136–168); mutually disagreeing foods and drinks (169–194); rules to be applied in the various stages of life (195–205).

The text is ascribed to a Nāgārjuna of unknown date, but may well have been composed before A.D. 1000. The Sanskrit original, which must have existed, for the Sanskrit title, *Jīvasūtra*, is mentioned in the Tibetan text, has not been preserved.

The *Rasavaiśeṣikasūtra* ascribed to Bhadanta Nāgārjuna

The *Rasavaiśeṣikasūtra*, ascribed to Bhadanta Nāgārjuna,⁴⁰⁶ is one of the very few āyurvedic texts in pure sūtra style.

Contents

The basic concepts of āyurvedic pharmacology are the main concern of this treatise, which contains 486 sūtras, arranged in four chapters.⁴⁰⁷

After some introductory sūtras, in which it is stated that dravya, rasa, guṇa, vīrya, vipāka and karman are the roots of health and disease, chapter one deals with prakṛti (the natural state), vikāra (a morbidly altered state), and the distinctions between the two (8–31); the relationships among the doṣas (32–48); the seats (sthāna) of the doṣas and the digestive fire (agni) (49–76); the nature of the doṣas (77–92); the concepts of agni, bala, sātmya, and their interrelations (93–94); the span of life (āyus) and signs foreboding death (ariṣṭa) (95–98); the concepts of dravya, rasa, etc., and their interrelations (99–171).

Chapter two discusses dravya and the differences between dravya and guṇa (1–22); rasa and the way it is distinguished from guṇa (23–29); vīrya (30–36); vipāka (37); karman (38); the five mahābhūtas (39–75); the classification of substances (76–77); the parts of trees and plants in general (78–98);⁴⁰⁸ the pāñcabhautika character of the body (99–110) and of the senses (111–122); the varieties of medicinal substances of vegetable, mineral and animal origin (123).⁴⁰⁹

Chapter three is concerned with the six tastes (rasa) (2); conflicting views about the number of rasas (3–5);⁴¹⁰ the many varieties of each rasa (6–10);⁴¹¹ proofs for the existence of six rasas (11–37);⁴¹² the connections between the tastes and the mahābhūtas (38–43), and between rasa and dravya (47–60); the relationships between the tastes and the doṣas (61–72); the combinations of rasas and their connections with the doṣas (72–110); the guṇas and their relationships with the mahābhūtas (112–117).

Chapter four begins with an enumeration of the eleven types of vīrya and discusses their relationships with the bhūtas (1–26); more types of vīrya (27–30); vipāka (31–55); karman (56); viruddhāśana (57–61); anupāna (62–63); substitutes for drugs (64–66);⁴¹³ svasthavṛtta (the regimen in health) and āturavṛtta (the regimen in ill-health, aiming at recovery) (67–69); the pramāṇas (70); the catuṣpāda (71–72), and, finally, the success in treatment (73).

The *Rasavaīṣeṣika(sūtra)* is quoted by Candrāṭa,⁴¹⁴ Ḍalhaṇa,⁴¹⁵ Priyavrat Śa-
rmā,⁴¹⁶ and Satyadeva Vāsiṣṭha.⁴¹⁷

*Special features*⁴¹⁸

The author does not blindly follow established traditions, but works out his own position with regard to basic āyurvedic concepts. Rather often he quotes a series of conflicting views on a particular subject, which are repudiated before he begins bringing forward his own opinion.⁴¹⁹ A noteworthy trend is the repeatedly expressed rejection of a hierarchical ordering of concepts like agni, bala, and sātmya (1.94), dravya, rasa, guṇa, vīrya and vipāka (1.164), though this type of order is a characteristic of the early saṃhitās. This trend is coupled to an insistence on medical experience as the decisive factor on which to base an appraisal of the relative importance of all these concepts.⁴²⁰

Interesting features are also the mention of two series of seven prakṛtis (1.31),⁴²¹ the enumeration of only ten guṇas (3.111),⁴²² and the recognition of a large number of vīryas (4.1 and 27).⁴²³ Remarkable is the absence of a discussion on prabhāva, which is an important notion in the *Carakasaṃhitā* and other texts. Anupānas are of six types, dependent on their action: āhārasātma, āhāravīryaghna, āhārānulomana, āhāraviparīta, āhārasodhana, and āhāraprajaraṇīya.⁴²⁴ The pramāṇas (means of acquiring valid knowledge) recognized are pratyakṣa, anumāna, upamāna, āgama, arthāpatti, and sambhava (4.70).⁴²⁵

The author

The name of the author is not mentioned in the text, but he is referred to as Bhadanta Nāgārjuna in the colophons of Narasiṃha's commentary on the work. His title Bhadanta,⁴²⁶ and also the addition of the term pravrajita to his name,⁴²⁷ may imply that he was regarded as a Buddhist, at least in later times.⁴²⁸ Ḍalhaṇa, who once quotes from the *Rasavaīṣeṣikasūtra* without mention of its title, ascribes it to Nāgārjunācārya.⁴²⁹ J. Filliozat, one of the very few scholars to devote his thoughts to the work and its author, concludes that, as the views expounded in the work do not conflict with those of the *Mūlamadhyamakārikā* of the Buddhist philosopher Nāgārjuna, both texts may have been composed by one and the same author.⁴³⁰ This identity cannot be established with any certainty; on the contrary, it seems much more likely that the two works were written by different persons, since no traces of Buddhism can be found in the *Rasavaīṣeṣikasūtra*, which is mainly based on Sāṃkhya and Vaiśeṣika views.⁴³¹ Sankara Menon⁴³² considered Bhadanta Nāgārjuna to be the same as a certain Nāgavīrya, mentioned as his guru by Narasiṃha in his commentary (ad 1.2) on the work. This view cannot be substantiated and is completely arbitrary.⁴³³

Date

The period of composition is hard to determine, but a quotation from the *Rasavaīṣeṣika* in Candrāṭa's commentary on Tīsaṭa's *Cikitsākalikā* provides a terminus ante quem, namely the period A.D. 900–1050.⁴³⁴ Sankara Menon⁴³⁵ was of the opinion that, if Bhadanta Nāgārjuna was the preceptor of Narasiṃha, he may be considered to belong to the seventh century;⁴³⁶ in that case he lived, together with Narasiṃha, a life of seclu-

sion in a vihāra of the Taluk⁴³⁷ of Shertalla, most probably at Tiruvīlai. P.V. Sharma⁴³⁸ expressed as his view that the work may have been composed in the fifth century,⁴³⁹ by the Nāgārjuna who revised and completed the *Suśrutasaṃhitā*. J. Filliozat dates it in the age of the Buddhist philosopher Nāgārjuna, i.e., the first or second century.⁴⁴⁰ It is impossible to reach precision about the chronological position of the text, but more data may become available after it has been carefully studied.

Narasimha's commentary (bhāṣya) on the *Rasavaiśeṣikasūtra*

Narasimha's commentary (bhāṣya) on the *Rasavaiśeṣikasūtra*⁴⁴¹ is essential for understanding the often obscure and very concise sūtras. It presents a considerable number of quotations, usually without naming the source, with the exception of Bharadvāja (1.2), Caraka (1.6), Nimi (3.36 and 4.30), Suśruta (1.6), and Urabha (3.36). Important is the absence of quotations from Vāgbhaṭa's works, the more so when it is conceded that the *Rasavaiśeṣikasūtra* and its commentary were composed in Kerala,⁴⁴² where Vāgbhaṭa is the leading authority in āyurvedic theory and practice. Some scholars⁴⁴³ inferred from this that Narasimha must be earlier than Vāgbhaṭa. As it is improbable that the latter became the foremost authority for physicians in Kerala immediately after the composition of his works, it is also legitimate to suppose that, in Narasimha's times, Vāgbhaṭa had not yet the great prestige he acquired later.

An important element in the discussion of Narasimha's date is a reference to Subandhu's *Vāsavadattā* (ad 1.2), a work that became popular in Kerala,⁴⁴⁴ and that probably dates from the seventh century.⁴⁴⁵ This provides us with a terminus post quem of Narasimha and shows that he is contemporaneous with or posterior to Vāgbhaṭa.

Sankara Menon, who put forward that Nāgavīrya, mentioned by Narasimha (ad 1.2) as his guru and the author of some commentary, might be the same as Bhadanta Nāgārjuna, regarded Narasimha's commentary as being inspired by the oral explanations of the text by its author.⁴⁴⁶ This view need not be adopted, because Narasimha may have received the traditional interpretation of the sūtra after a lapse of time. Nāgavīrya may even have been one of his predecessors in writing a commentary on the *Rasavaiśeṣikasūtra*, the more so since Narasimha refers to divergent interpretations.⁴⁴⁷

Sankara Menon's conclusion that Narasimha, together with his teacher, led a secluded life in a vihāra in the Taluk of Shertalla, most probably at Tiruvīlai,⁴⁴⁸ cannot be proved. Narasimha's adherence to the Buddhist faith was inferred by him from the absence of a māṅgalācaraṇa at the beginning of his commentary and from a single reference to the word vihāra (ad 1.1), which are rather weak grounds. Sankara Menon assigns Narasimha to the period A.D. 630–730,⁴⁴⁹ when Buddhism was still flourishing in Kerala.⁴⁵⁰ Until Narasimha's commentary has been subjected to thorough study, it can, however, only be asserted safely that he lived after Subandhu.⁴⁵¹

Narasimha's commentary is quoted in Priyavrat Śarmā's auto-commentary on the *Dravyaguṇasūtra*.

The *Yogaśataka*, attributed to Nāgārjuna or Vararuci

The *Yogaśataka*, attributed to Nāgārjuna or Vararuci,^{452,453} is an early example of a type of text to become current later, namely the type consisting of small collections of formulae of compound medicines (*yoga*), covering the eight divisions of *āyurveda*.

Contents

The *Yogaśataka* consists of a collection of verses in diverse metres,⁴⁵⁴ giving about one hundred recipes⁴⁵⁵ of compound medicines.⁴⁵⁶ The total number of stanzas varies in the MSS and editions.⁴⁵⁷

The body of the work has twelve sections, as indicated by the colophons: (1) *jvaracikitsā* (3–8); (2) *kāyacikitsā* (9–46); (3) *netracikitsā* (47–54); (4) *śālākyatantra* (55–62); (5) *śalyatantra* (63–65); (6) *viṣatantra* (66–70); (7) *bhūtavidyā* (71–74); (8) *bālatantra* (75–77); (9) *vājīkaraṇa* and (10) *rasāyana* (78–83); (11) *pañcakarman* (84–88); (12) *uttaratantra* (89–92).

This list shows that *jvaracikitsā* has been detached from *kāyacikitsā* and *netracikitsā* from *śālākyatantra* as separate items, making a total of ten divisions as against the traditional eight, and that a section on *pañcakarman* has been added, as well as one called *uttaratantra*. This last section specifies what is the best medicine in each group of diseases. The first two verses are of an introductory nature. Appended to the main body are lines of a more general purport, describing causes of excitation of the *doṣas* (103–105) and of *āma* (106), the relations between the seasons and the *doṣas* (107), and general measures of counteracting excitation of the *doṣas* (108–109). The treatise ends with two concluding verses.

Works referring to or quoting the *Yogaśata(ka)* by name are: Anantakumāra's *Yogarātnasamuccaya*,⁴⁵⁸ the *Bhesajjamañjūsāsannaya*, Harṣakīrti's *Yogacintāmaṇi*, Kalyāṇa's *Bālatantra*,⁴⁵⁹ Karandīkar's *Nidānadīpikā*,⁴⁶⁰ Mahimasamudra's *Vaidyakacintāmaṇi*, Mallinātha's commentary on the *Amarakoṣa*,⁴⁶¹ Meghamuni's *Meghavinoda*, Nīścalakara's *Ratnaprabhā*,⁴⁶² Nidhi's *Yogasamuccaya*, Rāmacandra's *Rāma- vinoda*, the *Rasoddhāratāntra*, Trimalla's *Yogatarāṅgiṇī* and *Brhadyogatarāṅgiṇī*, and the *Yogarātnākara*.⁴⁶³

Vararuci is quoted in Anantakumāra's *Yogarātnasamuccaya*,⁴⁶⁴ the *Bhesajjamañjūsāsannaya*, and Nīścalakara's *Ratnaprabhā*.⁴⁶⁵

Later treatises that have incorporated verses from the *Yogaśataka*⁴⁶⁶ are: *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, Cakrapānidatta's *Cikitsāsāmaṅgraha*,⁴⁶⁷ Sodhala's *Gadani-graha*, Ṭoḍara's *Āyurvedasaukhya*,⁴⁶⁸ Vaṅgasena's *Cikitsāsārasaṅgraha*, Vṛnda's *Siddhayoga*, and the *Yogarātnākara*.

Translations

The *Yogaśataka*, once a popular work in India and popular in Sri Lanka until recent times, was also known in Tibet and Central Asia. Its popularity in Central Asia appears from the fragments of a bilingual MS from Kucā, containing the Sanskrit text of parts of the *Yogaśataka*⁴⁶⁹ and their translation into Tocharian B.⁴⁷⁰ The Tocharian version, which is not a literal one, has been expanded by adding explanations, though it follows

the Sanskrit text closely. The date of the MS cannot accurately be determined, but it may belong to the seventh century or a somewhat earlier period.⁴⁷¹

The Tibetan translation of the *Yogaśataka* (*Sbyor-ba brgya-pa*) forms part of the Tanjur⁴⁷² as the first of the series of medical works included in this vast collection.⁴⁷³ Its colophon states that the text and its commentary⁴⁷⁴ were explained first by the mahāpaṇḍita, the brāhmaṇa Jetakaṇḍa⁴⁷⁵ from Nepal, while the paṇḍita Buddhāśrījñāna⁴⁷⁶ from Eastern India later explained the first part; it was finally brought into agreement with three commentaries, translated and edited by Śākyabhikṣu Dpal Ņi-ma rgyal-mčhan bzan-po⁴⁷⁷ (Śrī Sūryadhvajabhadra) at the request of the bhikṣu Amogha, who was well acquainted with the *Aṣṭāṅgaḥṛdayasaṃhitā*, in the temple Dpal-śer (Śrī Prajñā), situated near the temple Hphags-pa hñig-rten dbaṅ-po (Ārya Lokeśa) in Skyi-roñ.⁴⁷⁸ This colophon enables us to conclude that the Tibetan translation of the *Yogaśataka* was produced later than the Tibetan version of the *Aṣṭāṅgaḥṛdayasaṃhitā*, which dates from the period between A.D. 1013 and 1055,⁴⁷⁹ and that it came about with the collaboration of the Buddhāśrījñāna who lived about A.D. 1200.⁴⁸⁰ The Tibetan version of the *Yogaśataka* is not only found in the Tanjur, but also in the works of Bu-ston (A.D. 1299–1364),⁴⁸¹ accompanied by annotations (mčhan).⁴⁸²

Author and date

It is clear from the above account that the Tibetan translation is not of much value in dating the *Yogaśataka*. Much more valuable is the bilingual from Kucā,⁴⁸³ placed by J. Filliozat in the seventh century or somewhat earlier, which shows that the *Yogaśataka* must have been composed before this period.⁴⁸⁴

Not much evidence is available on the sources of the *Yogaśataka*, except that it has verses in common with the *Carakasamhitā*.⁴⁸⁵ The name of its last section, uttaratantra, points to a period of composition later than that of the Uttaratantra of the *Suśrutasaṃhitā*.

An important topic discussed in relation to the *Yogaśataka* and its date is whether or not it can be identified as a medical compendium referred to by the Chinese Buddhist pilgrim I-ching⁴⁸⁶ at the end of the seventh century.⁴⁸⁷ J. Filliozat⁴⁸⁸ repeatedly expressed that this compendium cannot possibly be, as often claimed, the *Aṣṭāṅgasamgraha* or *Aṣṭāṅgaḥṛdayasaṃhitā*. The *Yogaśataka* was a more suitable candidate in his eyes, which would establish the date of the work. Later,⁴⁸⁹ he expressed himself more cautiously in this matter. In this later period he was inclined to regard the Buddhist philosopher Nāgārjuna, who lived in the first or second century, as the author of medical treatises. He thought it to be not impossible to regard the *Yogaśataka* as a composition by this Nāgārjuna, though certainty could not be reached on this point.⁴⁹⁰ This early date of the *Yogaśataka* made him face two problems: firstly, that I-ching describes a recently composed treatise, and, secondly, that I-ching fails to mention the author by name, though Nāgārjuna was well known to him. This made Filliozat finally declare that no valid assertions can be made about the identity of the medical treatise mentioned by I-ching. I subscribe to the view that the issue cannot be settled. I-ching's observations are much too vague to be of any use in fixing the date of the *Yogaśataka* or any

other work regarded as representing the epitome referred to.⁴⁹¹

The attribution of the *Yogaśataka* to Nāgārjuna in Buddhist⁴⁹² and to Vararuci in Hindu tradition is not helpful for chronological purposes. The text involved is undoubtedly one and the same,⁴⁹³ but forms only one of the many works traditionally ascribed to these famous authors. These traditions are unreliable and it proves to be impossible to determine with any certainty who were the various authors of all these works ascribed to Nāgārjuna⁴⁹⁴ and Vararuci.⁴⁹⁵

Commentaries

Several commentaries are recorded on the *Yogaśataka* attributed to Nāgārjuna or Vararuci: (1) Amitaprabha's *Yogaśatabhāṣya*.⁴⁹⁶ (2) Bu-ston's annotations (mchan) on the Tibetan version; these annotations are based on (3) and (6).⁴⁹⁷ (3) Dhruvapāla's⁴⁹⁸ *Candrakalā*.⁴⁹⁹ (4) Govardhana's *Karmamālā*.⁵⁰⁰ (5) Hariharasannan's *Vaidyavalabhā*.⁵⁰¹ (6) A commentary by Khyab-*hjug-lha* (Viṣṇudeva).⁵⁰² (7) Mahīdhara's *Viśvavallabhā*.⁵⁰³ (8) A commentary by Mūlavara.⁵⁰⁴ (9) A commentary by Rūpanayana.⁵⁰⁵ (10) Samantabhadra's *Yogaśataṭīkā*.⁵⁰⁶ (11) Sanātana's *Vallabhā*.⁵⁰⁷ (12) Somadāsa's *Karmamālā*.⁵⁰⁸ (13) Śrīpūrṇasena's *Yogacintāmaṇi*,⁵⁰⁹ also called *Abhidhānacintāmaṇi*.⁵¹⁰ Pūrṇasena commented on a longer version of the *Yogaśataka*.⁵¹¹ His rather concise *ṭīkā* does not throw much light on the text of the *Yogaśataka*.⁵¹² Sources are not mentioned; he refers, in the introductory part of his commentary, to the *Kalyāṇakāraka*, Suśruta and Vāgbhaṭa. Pūrṇasena may have been a resident of Mahārāṣṭra.⁵¹³ (14) A commentary by Sūryadeva.⁵¹⁴ (15) A commentary called *Bālāvabodha*.⁵¹⁵ (16) A *vṛtti* by Vaikuṇṭhavaidya.⁵¹⁶

The following is known on their chronology: Rūpanayana is posterior to Ravigupta and Jejjāṭa, who are quoted by him, and earlier than about 1500;⁵¹⁷ Dhruvapāla, Govardhana,⁵¹⁸ Mahīdhara and Sanātana lived before Niścalakara, who quotes from their commentaries on the *Yogaśataka*;⁵¹⁹ Dhruvapāla and Khyab-*hjug-lha* are earlier than Bu-ston, whose annotations are based on their works;⁵²⁰ Śrīpūrṇasena is said to belong to the sixteenth century.⁵²¹

A number of works with the title *Yogaśataka* are recorded, some of which may ultimately prove to be identical with the *Yogaśataka* ascribed to Nāgārjuna or Vararuci. Their authors are: (1) Akṣadeva.⁵²² (2) Amṛtaprabha⁵²³ or Amitaprabha; some verses of the *Cakradatta*, borrowed from Amitaprabha according to Niścalakara, form probably part of his *Yogaśataka*, which had verses in common with the *Yogaśataka* ascribed to Nāgārjuna or Vararuci.⁵²⁴ (3) Anantayogīśvara; Nandalāla, pupil of Kalyāṇa, wrote a commentary on this work, called *Anvayacandrikā*.⁵²⁵ (4) Devendrakīrti Bhaṭṭāraka.⁵²⁶ (5) Haribhadrasūri.⁵²⁷ (6) Lakṣmīdāsa.⁵²⁸ (7) Madanasimha or Mathanasimha.⁵²⁹ (8) Samantabhadra.⁵³⁰ (9) Śrīkaṇṭhadāsa; Vararuci is said to have written a commentary, called *Abhidhānacintāmaṇi*, on this work.⁵³¹ (10) Vaidyanātha(putra).⁵³² (11) Vāmana.⁵³³ (12) Vidagdhaivaia.⁵³⁴ A *Vṛddhayogaśata* by Gauḍavaṃśatilaka,⁵³⁵ Pūrṇasena,⁵³⁶ and Pūrṇasetūttamasūri⁵³⁷ are also known, as well as an anonymous *Yogaśatābhidhāna*.⁵³⁸

The *Tantrayuktivivāra* by Nīlamegha Bhiṣaj

The *Tantrayuktivivāra* by Nīlamegha Bhiṣaj⁵³⁹ is a short treatise,⁵⁴⁰ which consists of thirty-six ślokaś, accompanied by a rather extensive auto-commentary. It defines, in the same order, the thirty-six tantrayuktis which are found at the end of the *Carakasamhitā* (Si. 12.41–45ab)⁵⁴¹ and the *Aṣṭāṅgasamgraha* (U.50.148–153). Only one item has been added to the series (aviparyaya, after viparyaya), without affecting the number of yuktis and verses as given in the text.

The tantrayuktis⁵⁴² are technical terms for the procedures which are necessary in order to arrive at a correct understanding and interpretation of scientific treatises. Vāgbhaṭa describes their function in the following way: “The tantrayuktis are like the rays of the sun on a pond with lotuses whose flowers are closed, and like the light of a lamp in a dark house. A person who studies the textbooks without being familiar with the tantrayuktis fails to grasp the meaning of what he reads, just as one fails to acquire wealth when one’s good fortune declines. By establishing the meaning of sentences, the tantrayuktis provide one with the desired success (in debates), enabling one to refute the propositions of those holding erroneous views. They reveal the meaning of utterances when these are hidden, interchanged, hinted at or indirectly expressed, and are said to be the essence of the ocean of the rules of speech” (A.s.U.50.154–157).

The tantrayuktis are only enumerated, not defined, in the *Carakasamhitā* and the *Aṣṭāṅgasamgraha*. Definitions and elucidations are supplied in the commentaries of Cakrapāṇidatta and Gaṅgādhara on the *Carakasamhitā*, Indu’s commentary on the *Aṣṭāṅgasamgraha*, and, above all, in Aruṇadatta’s commentary on the *Aṣṭāṅgharḍaya*.⁵⁴³ A list of thirty-two tantrayuktis, accompanied by explanations and illustrations, and commented on by Ḍaḷhaṇa, is found at the end of the *Suśrutasaṃhitā* (U.65). Another list, resembling that of the *Suśrutasaṃhitā*, and also consisting of thirty-two items, occurs at the end of the *Kauṭīliya Arthaśāstra* (adhikaraṇa 15).⁵⁴⁴ A list of thirty-two tantrayuktis, almost in the same order as in the *Suśrutasaṃhitā*, is found in the *Viṣṇudharmottarapurāṇa*.⁵⁴⁵

The definitions of the tantrayuktis in the work of Nīlamegha Bhiṣaj seem to be his own, or are those as expounded by his guru Sundara;⁵⁴⁶ in the latter case he only wrote the commentary.

The authoritative works quoted in his commentary are in the first place the *Aṣṭāṅgasamgraha* and *Aṣṭāṅgharḍayasamhitā*, while the *Caraka*- and *Suśrutasaṃhitā* rank second; Bhela, *Gopālikā*, tāntrikāḥ, and Parāśara are quoted once only.⁵⁴⁷

In the beginning and at the end the author mentions his name, Nīlamegha Bhiṣaj, and his second name, Vaidyanātha. The title of the work is given only at the end.

The treatise opens with salutations to Vāhaṭa: “May the physician Rāmagupta, who received his discernment from Avalokiteśvara,⁵⁴⁸ who is famous in this world under the name of Vāhaṭa, the moon of Sindhu from the lineage of Saṅghagupta,⁵⁴⁹ be present before our eyes”. The second verse refers to Indu and Jajjaṭa as pupils of Vāhaṭa. The third verse proclaims the author’s reverence for Ātreya and the other great sages, for the guru Āryāvalokita,⁵⁵⁰ Āryatārā,⁵⁵¹ Śrīsaṅghagupta, Vāhaṭarāmagupta, and the ācārya Sundara, while the fourth verse extols the excellence of the *Aṣṭāṅgasamgraha*. After

quoting the *Aṣṭāṅgasamgraha* (U.50.155, 150–153, 157), Nīlamegha makes it explicit that he composed his work according to the teaching of his guru Sundara.

The author

According to Kolatteri Śāṅkaramenon, this guru Sundara may be Sundarabhaṭṭācārya, the author of a work on toxicology, called *Lakṣaṇāmṛta*.⁵⁵² Kolatteri Śāṅkaramenon is of the opinion that both Sundara and Nīlamegha⁵⁵³ hail from Kerala,⁵⁵⁴ which is very probable indeed, because the only MS of Nīlamegha's treatise belongs to a member of one of the aṣṭavaidyā families of Kerala, who adhere to Vāgbhaṭa's teachings, as Nīlamegha did himself.

Date

Kolatteri Śāṅkaramenon places Nīlamegha in the first half of the ninth century,⁵⁵⁵ the period in which Śāṅkārācārya lived,⁵⁵⁶ because Buddhist influences are still traceable in Nīlamegha's composition. He is convinced that Nīlamegha knew only the *Aṣṭāṅgasamgraha*, which he assigns to the first quarter of the eighth century, and not yet the *Aṣṭāṅgahṛdayasaṃhitā*, which he regards as having been composed by a grandson or great-grandson of the author of the *Aṣṭāṅgasamgraha*.⁵⁵⁷ Kolatteri Śāṅkaramenon's views on the dates of the *Aṣṭāṅgasamgraha* and *Aṣṭāṅgahṛdayasaṃhitā* can be discarded. He is wrong in asserting that Nīlamegha did not yet know the *Aṣṭāṅgahṛdayasaṃhitā* because the latter work is profusely quoted in his auto-commentary, also when not identical with the *Aṣṭāṅgasamgraha*.⁵⁵⁸ Nīlamegha's references to Indu and Jejjāta as pupils of Vāgbhaṭa imply that he lived later than these commentators and cannot be earlier than about A.D. 700. The Buddhist influences point to a date not much posterior to A.D. 800.

The Kumāratantra ascribed to Rāvaṇa

The *Kumāratantra*,⁵⁵⁹ ascribed to Rāvaṇa, is a work on a particular class of demons afflicting children, and their appeasement.⁵⁶⁰

Contents

This short treatise, written in a mixture of verse and prose, describes twelve demons, called mātṛkā, who attack children on the first day after birth and in the first month or year of their lives, on the second day and in the second month or year, etc., up to the twelfth day, month, or year.⁵⁶¹

Their names are Nandanā, Sunandā, Pūtanā, Mukhamuṇḍikā, Kaṭapūtanā, Śakunikā, Śuṣkarevatī, Aryakā, Bhūsūtikā, Nirṛtā, Pilipicchikā, and Kāmukā. The symptoms of children who are seized by these demons are enumerated, followed by magico-religious procedures destined to appease them and usually consisting of fumigations, bali offerings, the presentation of food to brāhmaṇas, etc. Each of the twelve sections of the text ends with a mantra in which Rāvaṇa is invoked.⁵⁶²

The complete text of Rāvaṇa's *Kumāratantra* was, indicated as such, incorporated by Cakrapāṇidatta in his *Cikitsāsamgraha* (bālarogacikitsā 89–100)⁵⁶³ and commented

upon by Niścalakara and Śivadāśasena; it also forms part of Gaṅgādhara's commentary on the *Carakasaṃhitā* (ad Ca.Śā.8.65), Govindadāsa's *Bhaiṣajyaratnāvalī* (bālaroga 181–193),⁵⁶⁴ Ṭoḍara's *Āyurvedasaukhyā*,⁵⁶⁵ and Vaidyārāja's *Sukhabodha*.⁵⁶⁶ The *Amṛtasāgara*, attributed to Pratāpasimha, claims to reproduce the *Kumāratantra*, as found in the *Cakradatta*, but mentions a series of twelve mātṛkās with partly different names.⁵⁶⁷ A related text is found in Anantakumāra's *Yogaratanasamuccaya* (22.1–2),⁵⁶⁸ where Parāśara proclaims the *Kumāratantra* by Rāvaṇa, called *Nārāyaṇīya Bālatantra* in the colophon; the mantras, which are less in number, invoke Nārāyaṇa and Vāsudeva instead of Rāvaṇa. Trimalla's *Yogaratarāṅgiṇī* contains an extract from Rāvaṇa's *Kumāratantra*.⁵⁶⁹ Trimalla's *Bṛhadyogatarāṅgiṇī* presents a related text, called the *pūtanāvidhāna* from the *Kaumāratantra* by Rāvaṇa;⁵⁷⁰ the mantras of this work invoke Rāvaṇa and Nārāyaṇa for protection. The *Nighaṇṭuratnākara* and *Bṛhannighaṇṭuratnākara* mention, at the end of their sections on children's diseases, two series of grahīs, together with the symptoms they provoke and the treatment of these afflictions.⁵⁷¹ An unpublished Jain text, called *Vidyānuśāsana*,⁵⁷² contains a long section on bālagrahas that is said to derive from Rāvaṇa.⁵⁷³

The *Uḍḍiśatantra*, sometimes ascribed to Rāvaṇa, has a chapter (16), called *grastabālacikitsā*, which deals with the same subject as Rāvaṇa's *Kumāratantra*.⁵⁷⁴ The same applies to a chapter (pūrvārtha 41), entitled *Bālacikitsā*, of the *Īśāna(śiva)gurudevapaddhati*,⁵⁷⁵ and to a chapter (11) of Nārāyaṇa's *Tantrasārasaṃgraha*.⁵⁷⁶ The latter work describes three series of grahīs, who attack the child on the first to tenth day,⁵⁷⁷ in the first to twelfth month,⁵⁷⁸ and in the second to seventeenth year.⁵⁷⁹ Three related series of names occur in a chapter (299), entitled *bālagrahaḥarabālatantra*, of the *Agnipurāṇa*,⁵⁸⁰ and in Anantakumāra's *Yogaratanasamuccaya*.⁵⁸¹ Elaborate descriptions of many demons preying upon children are found in Kalyāṇa's *Bālatantra*. Śālinātha's *Rasamañjarī* contains a *Bālatantra* that is related to Rāvaṇa's *Kumāratantra*.

An illustrated, but fragmentary, Nepalese MS of a text that resembles the *Kumāratantra* of Rāvaṇa and was probably entitled *Dvādaśagrahaśānti*,⁵⁸² was edited and translated by P.C. Bagchi.⁵⁸³ This work partially agrees with Rāvaṇa's *Kumāratantra*, but shows a closer affinity with a *Rāvaṇatantra* preserved in the Chinese Tripitaka.⁵⁸⁴ In the latter work the diseases caused by the grahamātṛkās are somewhat more distinctive and the mantras are different in each case. The Sanskrit names of the twelve mātṛkās of the Chinese text are Mātṛnandā, Sunandā, Revatī, Mukhamaṇḍikā, Biḍālī, Śakunī, Pūtanā, Śuṣkā, Āryakā, Jambhakā,⁵⁸⁵ Pilipicchikā, and Skandā.⁵⁸⁶

Demons called mātṛkā and similar beings who lurk upon children are mentioned in several more texts.⁵⁸⁷ A series of sixteen of these, threatening children from the first to the sixteenth day after birth and called *Jātaḥārīṇī*, is described in the *Kāśyapaśaṃhitā*.⁵⁸⁸ Their names are Piśācī, Yakṣī, Āsurī, Kali, Vāruṇī, Śaṣṭhī, Bhīrukā, Yāmyā, Mātāṅgī, Bhadrakālī, Raudrī, Vardhikā, Caṇḍikā, Kapālamālīnī, Revatī, and Pilipicchikā. The *Hārītasamhitā*⁵⁸⁹ has recorded two series of these beings, called Pūtanā. The first consists of Lohitā, Revatī, Dhvāṅkṣī (or Vāyasī), Kumārī, Śakunī, Śivā, Ūrdhvaskeśī, and Senā, who attack a child on the first to eighth day, while the names belonging to the second series are Rohiṇī, Vijayā, Kālī, Kṛttikā, Dākinī, Nisā, Bhūtakesī, and Kṛ-

śāṅgī.

A Tamil text that can be regarded as a parallel of the *Kumāratantra* was edited, translated and studied by J. Filliozat.⁵⁹⁰

Buddhist literature is acquainted with Hārītī as a deity devouring children.⁵⁹¹

Rāvaṇa's *Kumāratantra* is, apart from the texts already mentioned, quoted or referred to in Ambikādatṭaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Cakrapāṇidatta's *Bhānumatī*,⁵⁹² Dalhaṇa's *Nibandhasaṃgraha*,⁵⁹³ Gaṅgādharma's commentary on the *Carakasamhitā*,⁵⁹⁴ Gayadāsa's commentary on the *Suśrutasaṃhitā*,⁵⁹⁵ Jagannātha's *Yogasamgraha*,⁵⁹⁶ and Nīlakaṇṭha's *Śāntimayūkha*.⁵⁹⁷

An unknown work by Rāvaṇa is quoted by Kāśīrāma.⁵⁹⁸

Khare's commentary on the *Rasaratnasamuccaya* quotes Rāvaṇa on subjects belonging to alchemy.⁵⁹⁹ Laṅkeśa, i.e., Rāvaṇa, is mentioned as one of the Rasasiddhas in the *Pāradasaṃhitā* (1.96), *Rasajalanidhi* (III, 389–390), *Rasaratnasamuccaya* (1.2),⁶⁰⁰ *Rasatarāṅginī* (1.29–32), and *Rasendrasambhava* (introductory verses).

The *Bhaiṣajyaratnāvalī* contains a recipe proclaimed to Rāvaṇa by Devadeva.⁶⁰¹ G. Hāldār mentions a formula (pūrṇacandrarasa) made by Śaṃkara for the benefit of Rāvaṇa.⁶⁰²

The Bombay edition of the *Kumāratantra* adds, after the twelve sections on the māṭrkās, 189 verses on children's diseases and their treatment.⁶⁰³

Other works going under the name of Rāvaṇa are:⁶⁰⁴

- 1 A *Rāvaṇakaumāratantra* in prose, of Buddhist inspiration, not identical with the published texts.⁶⁰⁵
- 2 A *Bālatantra* ascribed to Rāvaṇa.⁶⁰⁶
- 3 A *Bālatantra* ascribed to Daśagrīva.⁶⁰⁷ This work resembles the *Kumāratantra* in its general outline, but differs considerably in its details.⁶⁰⁸
- 4 A *Bālacikitsā* according to Rāvaṇa.⁶⁰⁹
- 5 A *Nāḍīparikṣā* ascribed to Rāvaṇa.⁶¹⁰
- 6 An *Arkaprakāśa* attributed to Rāvaṇa.⁶¹¹
- 7 An *Arkaprakāśa* or *Arkacikitsā* by Laṅkānātha or Laṅkeśvara.⁶¹²
- 8 A *Nibandhasaṃgraha* ascribed to Laṅkānātha.⁶¹³
- 9 A *Prākṛtakāmadhenu* attributed to Laṅkeśvara.⁶¹⁴
- 10 A *Śivastuti* attributed to Laṅkeśvara.⁶¹⁵
- 11 A *Kālāgnirudropaniṣad* ascribed to Laṅkeśvara.⁶¹⁶
- 12 A *Ṛgvedabhāṣya*.⁶¹⁷
- 13 A *Śrīsūkṭabhāṣya*.⁶¹⁸
- 14 *Dīnākrandana* by Rāvaṇa,⁶¹⁹ also called *Dīnākrandanastotra* by Laṅkeśvara.⁶²⁰
- 15 The *Vaiśeṣikakaṭandī*, an old bhāṣya on the *Vaiśeṣikasūtras*.⁶²¹
- 16 The *Uḍḍīṣatantra*⁶²² and the *Indrajāla Uḍḍīṣa*.⁶²³
- 17 The *Laṅkeśasiddhānta*.⁶²⁴

A *Bālagrahārogyaśānti* according to Rāvaṇa's *Kumāratantra* is also recorded.⁶²⁵

A *Kaumāratantra* by Pārvatī is mentioned in some MSS of Vaṅgasena.⁶²⁶

The author

The attribution to Rāvaṇa⁶²⁷ of a treatise that deals with rituals aiming at the propitiation of demonic beings, whereas Rāvaṇa himself is a rākṣasa with demonic aspects, has been discussed by J. Filliozat, who traced his development into a benevolent being and the reputed author of medical treatises.⁶²⁸ A famous Buddhist text, the *Laṅkāvatārasūtra*, describes him as a pious king who gives a warm reception to the Buddha.⁶²⁹ The Uṭtarakāṇḍa of Vālmīki's *Rāmāyaṇa* contains passages which extol Rāvaṇa,⁶³⁰ a trend which assumes a more pronounced character in later versions of the *Rāmāyaṇa*, for example those composed by Jain authors;⁶³¹ the same phenomenon is visible in Tamil literature.⁶³²

J. Filliozat concluded that Rāvaṇa is one of the numerous ambivalent beings in Indian mythology, to be compared with Rudra. P.C. Bagchi noticed that, in the *Mahāmāyūrī*, Rāvaṇa is also the name of the yakṣa who protects Rāmaṭha, while Kāpiśī is protected by another yakṣa called Laṅkeśvara.⁶³³ T. Goudriaan describes Rāvaṇa as an ambivalent god of diseases and magical protection who may be compared to Skanda and Tumburu.⁶³⁴ In the twentieth century, Rāvaṇa is being raised to the status of an admirable Dravidian hero by many Tamils.⁶³⁵

Date

The *Kumāratantra* is at least older than the eleventh century, since *Cakrapāṇidatta* was acquainted with it, and probably earlier than the tenth century, because a similar text was translated into Chinese by Dharmadeva who went to China in the year 937.

The *Siddhasāra* by Ravigupta

The *Siddhasāra* by Ravigupta⁶³⁶ is the earliest medical treatise of a new type, in which the material on nidāna and cikitsā, together with that on some more general subjects, has been arranged in a more or less systematic way.

Contents

The *Siddhasāra* counts 2,634 lines, which agrees with the author's own statement about the extent of his work (31.37). Each of its thirty-one chapters deals with a different topic or cluster of topics. It is in verse, except for one mantra, and has entirely been composed, not compiled, by Ravigupta, which is highly remarkable, though some lines are so close to verses found in the early *samhitās* that it is hard to believe that they are independent.⁶³⁷ Ravigupta mentions (31.37) as his sources Dhanvantari, i.e., the *Suśrutasamhitā*, and the son of Atri, i.e., the *Carakasamhitā*, but Vāgbhaṭa is conspicuously absent.

The first four chapters deal with general subjects: (1) tantra (describing the eight aṅgas of āyurveda), types of diseases, the qualities of the doṣas, the tastes, types of country, the constitutions, etc.; (2) *dravyaguṇa*, enumerating the groups of drugs and their actions;⁶³⁸ (3) *annapānavidhi*, listing medicinal properties of foods and drinks; (4) *arīṣṭa*, describing prognostic signs. Chapters five to twenty-three enter into those subjects which mainly belong to the realm of *kāyacikitsā*, though *bhagandara* and *upadamaṣa*,

usually regarded as forming part of śālyā, are discussed in chapters belonging to this section.⁶³⁹ Chapters twenty-four and twenty-five are concerned with śālyā, twenty-six is about śālākya, twenty-seven about viṣa(tantra), twenty-eight about rasāyana and vājīkaraṇa, and twenty-nine about kaumārabhṛtya; bhūtavidyā is represented by chapter twenty, concerned with unmāda and apasmāra. Chapter thirty deals with pañcakarman, and chapter thirty-one with kalpa (rasana-, bhallātaka-, and other kalpas).

Therapy is the predominant concern of the *Siddhasāra*, and only a few lines of each chapter are devoted to nidāna. Ravigupta's teachings are embedded in the main current of the āyurvedic tradition and consequently relatively free from divergent features.

Later authors made ample use of the *Siddhasāra*.⁶⁴⁰

Ravigupta and the *Siddhasāra* are quoted by name by numerous medical authors: Āḍhamalla,⁶⁴¹ Ananta,⁶⁴² Aruṇadatta,⁶⁴³ Bhāradvāja,⁶⁴⁴ Candranandana,⁶⁴⁵ Candrāṭa,⁶⁴⁶ Gopāladāsa, Jivānandavidyāsāgara,⁶⁴⁷ Lakṣmīrāma,⁶⁴⁸ Niścalakara,⁶⁴⁹ Rūpanyana,⁶⁵⁰ Śivādāsasena,⁶⁵¹ Sodhala,⁶⁵² Śrīkaṇṭhadatta,⁶⁵³ Tṛḍara,⁶⁵⁴ and Viṣṇudeva.⁶⁵⁵ The *Siddhasāra* is moreover quoted in the *Bāhaṭagrantha*⁶⁵⁶ and in the interpolated portion, written by an unknown author, of Niścalakara's *Ratnaprabhā*. It is mentioned as a source in the *Ratnākaraṣadhayogagrantha*.⁶⁵⁷ It is referred to in the anonymous *Vaidyaśāstrapratyakācāryānāmasamuccaya*. The widespread fame acquired by Ravigupta's work is shown by quotations from it in al-Rāzī's *Kitāb al-Ḥāwī*.⁶⁵⁸

Niścalakara indicates in his *Ratnaprabhā* which verses of Cakrapāṇidatta's *Cikitsāsaṃgraha* were borrowed from Ravi(gupta) and his *Siddhasāra*.⁶⁵⁹

Special features

Pitta is said to be located in the pakvāśaya (1.17–18).

The order of the diseases does not conform to that found in the early saṃhitās and seems to be peculiar to Ravigupta; it was ignored by later authors. A series of disorders and their therapy, specified in the early saṃhitās, are not described in the *Siddhasāra*, such as ajīrṇa, arocaka, kṣatakṣīṇa, the kṣudrarogas, bhagna, mūtrāghāta, mūrchā, vidradhi, viśucikā, śūkaroga, śūla, and svarabheda.⁶⁶⁰

The author

Ravigupta mentions, in the beginning and at the end of his treatise, his own name and that of his father, Durgagupta, who was an aśvavaidya from the West. He adds that he wrote the work on the insistence of his elder brother, Devagupta, who suffered from an illness, called pāṇḍunāga.⁶⁶¹

Date

Clues to the date of the *Siddhasāra* are provided by its translations into Tibetan,⁶⁶² Khotanese,⁶⁶³ and Uighur,⁶⁶⁴ which testify to its popularity.⁶⁶⁵ As the Khotanese translator was acquainted with the Tibetan version,⁶⁶⁶ the date of the latter, made in the early ninth century, gives us a provisional terminus ante quem.

The ample use made of the *Siddhasāra* by later authors helps to bring down this provisional limit, since several verses were incorporated in the *Mādhavanidāna*.⁶⁶⁷ and

Mādhvacikitsā, which date from the eighth century.

The terminus post quem is more difficult to establish, but the date suggested by R.E. Emmerick, ca. A.D. 650,⁶⁶⁸ is acceptable and accounts for the fact that Vāgbhaṭa, who lived about A.D. 600, is not mentioned as a source by Ravigupta.⁶⁶⁹

The *Siddhasāranighaṇṭu*

The *Siddhasāra* is followed by the *Siddhasāranighaṇṭu*,⁶⁷⁰ which is known in two versions, one in verse⁶⁷¹ and the other in the form of a list;⁶⁷² both give synonyms of the vegetable and inorganic substances prescribed in the *Siddhasāra*. The versified nighaṇṭu and the list seem to have influenced each other.⁶⁷³

The *Siddhasāranighaṇṭu* conforms to the old type of nighaṇṭu in giving only synonyms, and not adding the properties and actions of the medicinal substances as in nighaṇṭus of the later type.⁶⁷⁴ It is a work of great importance, since it may be the earliest nighaṇṭu we possess and the only one appended to a rather early medical text.⁶⁷⁵ The nighaṇṭu, though essential for a correct understanding of the *Siddhasāra*, has, to their disadvantage, not always been utilized by the translators.⁶⁷⁶

Interesting is the occurrence of the word *tulasī* (105) in this early work, since this term was regarded as appearing for the first time in the *Paryāyaratnamālā*.⁶⁷⁷

Interesting and rare synonyms are: *jhaṣā* = *nāgabalā* (7);⁶⁷⁸ *kākolī* = *nākulī* (27); *kaṇṭakā* = *mahāśyāmā* = *vṛkṣabhāryā* (123);⁶⁷⁹ *kavuka* = *khapura* (99);⁶⁸⁰ *kulajā* = *surasī* (109);⁶⁸¹ *laṅgaka* = *tripuṭa* (180);⁶⁸² *murūṅgi* = *vāyasī* (147);⁶⁸³ *śaṅkhinī* = *tiktavīryā* = *akṣipīluka* (126);⁶⁸⁴ *saptigandhā* = *aśvagandhikā* (137);⁶⁸⁵ *śaśvatkṣīrī* = *nandivṛkṣa* (18);⁶⁸⁶ *śvetaka* = *dhava* (95);⁶⁸⁷ *vasuvahā* = *rāsnā* (28);⁶⁸⁸ *yavatiktā* = *saptalā* (125).⁶⁸⁹

Date

The date of the *Siddhasāranighaṇṭu* is difficult to determine.⁶⁹⁰ It may have been composed some time after the *Siddhasāra* itself. A terminus ante quem would be established if P.V. Sharma were right in claiming that Vṛmda (about A.D. 900) and Candraṭa (tenth century) have borrowed from it,⁶⁹¹ but this assertion has not been substantiated.

Some medical treatises with titles containing the word *Siddhasāra* are recorded in MSS catalogues, but these texts have nothing in common with Ravigupta's work. These treatises are: the *Siddhasāratāntra* by Nīśācarabhaṭṭācārya,⁶⁹² the *Siddhasārasaṃgraha*,⁶⁹³ and the *Siddhasārasaṃhitā*.⁶⁹⁴

Tīsaṭa

Tīsaṭa⁶⁹⁵ was the author of the *Cikitsākalikā*,⁶⁹⁶ a short medical treatise,⁶⁹⁷ composed in about 400 skillful verses⁶⁹⁸ of diverse metres.⁶⁹⁹

Contents

The *Cikitsākalikā* can conveniently be divided into two unequal parts, the first (3–94) dealing with basic principles of medicine and general aspects of treatment, the second

(99–399) being about the therapy of various diseases.

The work opens with two introductory verses, the first of which is in praise of Sūrya, the Aśvins, Dhanvantari, Suśruta, and Tīsaṭa's father, while the second refers to Hārīta, Suśruta, Parāśara, Bhoja, Bhela, Bhṛgu, Agniveśa, and Caraka as sources of the *Cikitsākalikā*.

Authorities mentioned in the body of the work are: Āstka (387), the Aśvins (227; 306), Bhela (248), Bhṛguja (i.e., Śukra; 375), Caraka (41; 162; 302; 345), Janakātmaja (i.e., Videha; 347), Kāṅkāyana (147; 151), Parāśara (302), Pracetas (i.e., Varuṇa; 383), Suśruta (145),⁷⁰⁰ and Videha (230; 304). The name of Vāgbhaṭa is conspicuously absent.

Candraṭa's commentary on the *Cikitsākalikā* also discloses some sources: Caraka (161–162), Hārīta (212–215), and Kṣārapāṇi (208–211). P.V. Sharma is of the opinion that Vṛnda's *Siddhayoga* may also have been put to use by Tīsaṭa.⁷⁰¹

Verses 4–16 are about the components of the human body. Verses 17–40 deal with the tridoṣa doctrine and contain the famous verses, often quoted by later authors,⁷⁰² on the causes of excitement of each of the three doṣas and the symptoms of this excitement. Verses 48–65 enumerate eighteen groups (gaṇa) of drugs and their actions, while 68–85 are concerned with sneha, sveda, and pañcakarman. Verses 87–94 are about general measures of treatment. Verses 95–97 give a list of diseases belonging to the division of kāyacikitsā; verse 98 lists the seven remaining āṅgas of āyurveda.

The remaining part of the work is devoted to therapy. It is divided into sections⁷⁰³ on kāyacikitsā (99–325), śālākyaśāstra (326–352), śalyaśāstra (353–364), bhūtavidyā (365–377), kaumāratantra (378–380), viṣatantra (381–389), rasāyana (390–394), and vājīkaraṇatantra (395–399). Tīsaṭa's arrangement of the diseases in the section on kāyacikitsā has no parallel in other treatises.

Authors and works quoting from or referring to Tīsaṭa or his *Cikitsākalikā* are: Āḍhamalla,⁷⁰⁴ Anantakumāra,⁷⁰⁵ the *Āyurvedābhisāra* and its commentary, Bhāvamiśra in his *Bhāvaprakāśa*,⁷⁰⁶ the *Bhesajjamañjūsāsanaya*, Candraṭa in his commentary on the *Cikitsākalikā* and in his *Yogaratanasamuccaya*, Gopāladāsa, Guṛājśarmamiśra in his *Viśikhānupraveśavijñāna*, Hariprapanna in his *Rasayogasāgara*, Hemādri,⁷⁰⁷ Karandīkar in his *Nidānāḍipikā*,⁷⁰⁸ Kāśīrāma,⁷⁰⁹ Khare in his commentary on the *Rasaratnasamuccaya*, Niścalakara,⁷¹⁰ Priyavrat Śarmā in his auto-commentary on the *Dravyaguṇasūtra*, Śivadāsaśena,⁷¹¹ Soḍhala,⁷¹² Ṭoḍara,⁷¹³ Trimalla in his *Yogatarāṅgiṇī*,⁷¹⁴ and *Bṛhadyogatarāṅgiṇī*,⁷¹⁵ Vijayarakṣita in the *Madhukośa*,⁷¹⁶ the *Vīrasimphāvaloka*,⁷¹⁷ the *Yogaratanākara*,⁷¹⁸ and Yogendranātha in the *Āyurvijñānaratnākara*.⁷¹⁹ Harṣakīrti, Jayaratna, and Māgacandraśiva mention the (*Cikitsā*)*kalikā* as one of their sources.

A valuable commentary on the *Cikitsākalikā* was written by Tīsaṭa's son, Candraṭa.⁷²⁰

Special features

Tīsaṭa gives a list of diseases to be ascribed to bad acts committed in previous lives (10–12).⁷²¹ The three chief vulnerable parts (marman) are said to be the cardiac, ano-rectal and umbilical regions (25).⁷²² The number of eighteen groups of drugs (48–65) is pecu-

liar to Tīsaṭa's work. The first six of them are said to subdue vāta, pitta, kapha, vātapitta, vātakapha, and pittakapha, the eleventh group (elādi) consists of drugs against poison (viṣa), kapha, and vāta. The remaining gaṇas, apart from the fifteenth (varuṇakādi), to be prescribed against a variety of diseases, are well-known smaller groups: triphalā, trikaṭuka, pañcakola, pañcavalkala, aṣṭavarga, trisugandhin, caturjātaka, mahat- and laghupañcamūla, and finally daśamūla. The elādi- and varuṇakādigāṇas may have been borrowed from the *Suśrutasaṃhitā* (Sū.38.24–25 and 10–11), as well as the two pañcamūla groups and the daśamūla group (Sū.38.66–71).⁷²³ Some other gaṇas, namely triphalā, trikaṭuka, pañcakola, trijātaka and caturjātaka, may have been inspired by Vāgbhaṭa (A.h.Sū.6.159–166) according to P.V. Sharma,⁷²⁴ although this author is not referred to as a source by Tīsaṭa⁷²⁵ and clear resemblances cannot be detected.⁷²⁶ Some recipes differ from those in earlier works⁷²⁷ or are based on a compromise after the consultation of various sources.⁷²⁸ Verses 309–325, on prakīrṇaṣaḍhāni, contain a list of remedies which are particularly helpful in certain disorders.^{729 730}

The author

Nothing is known with certainty about Tīsaṭa, except that he was the father of Candraṭa, who wrote a commentary on the *Cikitsākalikā*, and, as is evident from the first verse of the *Kalikā* and Candraṭa's comment on it, that he was the son of a physician whose name is not disclosed. The colophons of a number of MSS call Tīsaṭa the son of Vāgbhaṭa.⁷³¹ Tīsaṭa's name may indicate that he was born in Kāśmīr.⁷³²

Candraṭa explains in his commentary that Sūrya, who is praised in the first verse of the *Cikitsākalikā*, was Tīsaṭa's family deity, which makes clear that Tīsaṭa, just like Ḍalhaṇa, was a brāhmaṇa of the Saura tradition.⁷³³

G. Hāldār supposes that Tīsaṭa was also the author of a work called *Vaidyatṛiṇ-śat*.⁷³⁴

Date

Tīsaṭa's sources are of no avail in establishing his date, in spite of the statement by Jolly that the occurrence of Bhoja's name in the list of verse two may point to the eleventh century as the terminus post quem for the composition of his work.⁷³⁵ It is quite uncertain who this Bhoja was and when he lived. The colophons of the MSS that call Tīsaṭa the son of Vāgbhaṭa are not helpful either, firstly, because these colophons may date from a later age, secondly, because of the absence of the name of Tīsaṭa's father in the text of the *Cikitsākalikā* and its commentary,⁷³⁶ and, thirdly, since no information is available on the identity of this Vāgbhaṭa. P.V. Sharma's claim that Tīsaṭa made use of the works of Vāgbhaṭa⁷³⁷ is in need of corroboration; his view that Tīsaṭa probably borrowed from Vṛṇḍa's *Siddhayoga*⁷³⁸ has no firm basis, since the formulae referred to are not closely similar in wording.⁷³⁹ The fact that the arrangement of the diseases in the *Cikitsākalikā* is free from influences from the side of Mādhava's *Rugvinīśaya* cannot be used as evidence for a very early date, since many works composed after the eighth century disregard Mādhava's scheme. Nevertheless it is worthy of notice that the new diseases introduced by Mādhava and Vṛṇḍa are absent from Tīsaṭa's work.⁷⁴⁰

The chronological position of the *Cikitsākalikā* can be deduced only from

Candraṭa's commentary. The earliest author, apart from Candraṭa, who is known to have utilized Tīsaṭa's work is Cakrapāṇidatta.⁷⁴¹

The evidence available points to the tenth century as the age in which Tīsaṭa must have lived.⁷⁴²

The *Kalyāṇakāraka* by Ugrāditya

The *Kalyāṇakāraka* by Ugrāditya⁷⁴³ is a comprehensive medical treatise by a Jain author. Other medical works ascribed to him are the *Bhīṣakprakāśa*,⁷⁴⁴ *Jagatsundarī*,⁷⁴⁵ *Kanakadīpaka*,⁷⁴⁶ and *Rāmavinodā*.⁷⁴⁷

Contents

The work consists of about 8,000 verses⁷⁴⁸ and some prose,⁷⁴⁹ arranged in twenty-five chapters (pariccheda) and two additional ones. It is also divided into two systems of adhikāras, long and short ones. Chapters one to six constitute the svāsthyaśaṇḍadhikāra, seven to twenty the cikitsādhikāra, and twenty-one to twenty-five the uttaracikitsādhikāra, uttaratantra or uttaratantrādhikāra. Many chapters are subdivided into short adhikāras devoted to a single disease or to a group of diseases.⁷⁵⁰

The first seven chapters discuss general subjects. After a maṅgala addressed to the first Tīrthaṅkara, Ṛṣabha,⁷⁵¹ the book opens with the Jain version of the descent (avatāra) of āyurveda (1.2–10): the medical science was revealed by Ādinātha (= Ṛṣabha), with the goddess Sarasvatī⁷⁵² as an intermediary, to the first cakravartin,⁷⁵³ Bharata,⁷⁵⁴ and others, when mankind became oppressed by disease in the present avasarpinī,⁷⁵⁵ subsequently, every Tīrthaṅkara⁷⁵⁶ proclaimed this science, until it was acquired by the gaṇadharas,⁷⁵⁷ śrutakevalins⁷⁵⁸ and other holy men, who transmitted it to their pupils.

Chapter one also deals, amongst other things, with prognostics (30–47). Chapter two is concerned with embryology (41–58), three with anatomy (2–12), the constitutions (17–27) and the doṣas (47–68), four with time and the seasons (2–15), grains and pulse (20–26), vegetables and fruits (27–46), five with liquid foods (3–34), urines (35–37) and anupāna (38–42), six with dinacaryā and rātrīcaryā (1–25), vājīkaraṇa (30–40) and rasāyana (41–67), seven with general subjects relating to therapy.

The section on nidāna and cikitsa covers chapters eight to nineteen. The arrangement of the diseases is peculiar to this text. Chapter eight is concerned with vātaroga, including ūrustambha and vātarakta. Chapter nine is about pittaroga, i.e., raktapitta, asṛgdara, visarpa, vātarakta again (only its therapy), jvara, and atisāra. Chapter ten deals with kapharoga, without mentioning specific diseases. Chapters eleven to twelve discuss mahāmaya, the major diseases, which consist of prameha, the pramehapiṭakāḥ, sadyovraṇa, kuṣṭha, udara (chapter eleven), vātaroga again (therapy only), mūdhagarbha and various disorders of pregnancy, bālagraha, and arśas (chapter twelve). Chapters thirteen to eighteen cover what is called kṣudraroga, the minor diseases, in the *Kalyāṇakāraka*, which consist of a very large group of disorders, namely śarkarā, aśmarī, bhagandara, vṛddhi (chapter thirteen), vidradhi, granthi, upadamśa, sūkadoṣa, ślipada, apacī, nāḍīvraṇa, galagaṇḍa, arbuda, śopha, and the group of kṣudrarogas in the stricter sense of the term (chapter fourteen), the diseases

belonging to the division of śālākya, i.e., śiro-, kārṇa-, nāsā-, mukha-, and netraroga (chapter fifteen), śvāsa, kāsa, virasaroga, tṛṣṇā, chardi, arocaka, svarabheda, udāvarta, hikkā, and pratiśyāya (chapter sixteen), hṛdroga, krimiroga, ajīrṇa, mūtrāghāta, mūtrakṛcchra, yoniroga, gulma, pāṇḍuroga, mūrchā, unmāda, and apasmāra (chapter seventeen), śoṣa (= kṣayaroga), masūrikā and visphoṭa, bālagraha again, and finally graha (chapter eighteen). Chapter nineteen is about viṣa.⁷⁵⁹

Chapter twenty deals with many subjects, e.g., the sixty therapeutical procedures (4–7), the ten ways of taking a drug (18–21), the combinations of tastes (28), prognostics (30–47), and the marmans (49–83). Chapter twenty-one is concerned with caustics (kṣāra; 9–17), cautery (agnikarman; 18–30), bloodletting by means of leeches and allied topics (33–51), and surgery (52–65). Chapter twenty-two deals with pañcakarman, disorders resulting from improper treatment, and the therapy of these disorders. Chapter twenty-three is about uttarabasti, śukra- and ārtavadoṣa, the care for pregnant women, obstetrics, dhūmapāna, gaṇḍūṣa, kavala and nasya, śoṭha, and the treatment of palita. Chapter twenty-four discusses the processing of mercury and mercurial preparations. Chapter twenty-five deals with a series of kalpas.

The first additional chapter (pariśiṣṭādhyaḥ) describes prognostic signs; the second (hitāhitādhyaḥ) is a long discourse in prose in defense of a vegetarian diet, delivered by Ugrāditya at the court of Nṛpatuṅgavallabha.⁷⁶⁰

Some subjects are discussed twice, such as sveda (8.31–32 and 22.21–29), vamaṇa (8.33–37 and 22.33–41), and nasya (8.68–72 and 23.57–76). Prognostics (ariṣṭa) is a topic discussed in various chapters (1.30–47; 20.30–47; pariśiṣṭādhyaḥ). Surgery has a rather important place in this treatise: 11.51–53, the bandaging of wounds; 12.101–111, the surgical treatment of arśas, i.e., haemorrhoids; 13.53–58, the treatment of bhaṅḡandara, i.e., ano-rectal fistulas; 14.30–31, the eight surgical procedures; 15.244–249 and 274–283, treatment of eye diseases, couching of cataract; 20.49–83, descriptions of the marmans.

Religious and magical therapy are of minor importance,⁷⁶¹ but Jain doctrines and practices are referred to frequently.⁷⁶² Each chapter begins with a maṅgala addressed to Rṣabha, Ariṣṭanemi,⁷⁶³ Vardhamāna (= Mahāvīra),⁷⁶⁴ the Tirthankaras, etc., and ends always with the same verse, referring to the revelation of the medical science by the Jinas. The sections on dravyaguṇa (4.20–46) and the therapeutical prescriptions are characterized by the absence of meat, honey⁷⁶⁵ and alcohol,⁷⁶⁶ in accordance with Jain doctrine,⁷⁶⁷ but substances of animal origin like hair, nails, bones and excrements are freely used.

Inorganic substances regularly form part of medicines. Chapter twenty-four shows a rather advanced stage of alchemy.⁷⁶⁸

The tridoṣa theory is of great importance in the *Kalyāṇakāraka*, but blood is also recognized as a factor causative of diseases.⁷⁶⁹

Ugrāditya's sources have not been investigated,⁷⁷⁰ but he states himself that his work is a shortened version of an extensive treatise on the eight limbs of āyurveda by Samantabhadra (20.86),⁷⁷¹ while the prime source of all medical works is said to be the *Prāṇāvāda* (20.84) or *Prāṇāvāya* (21.3; 25.54).⁷⁷²

Ugrāditya refers to several authorities who were specialists in one of more

branches of āyurveda (20.85): Pūjyapāda⁷⁷³ (śālākya), Pātrasvāmin (śālya),⁷⁷⁴ Siddhasena (agada and bhūtaavidyā),⁷⁷⁵ Daśarathaguru (kāyacikitsā),⁷⁷⁶ Meghanāda (kaumārabhṛtya), and Śiṃhanāda (vājīkaraṇa and rasāyana).⁷⁷⁷ Other authorities mentioned by Ugrāditya are Jaṭācārya (Śrījaṭa; 15.290),⁷⁷⁸ Kumāranandin (20.23),⁷⁷⁹ Kumārasena,⁷⁸⁰ Śrutakīrti (20.23),⁷⁸¹ and Virasena (20.23).⁷⁸²

The hitāhitādhyāya quotes Caraka (p.715, 724, 725, 726, 738, 744), Kapilamuni (p.722), Kṣārāpāṇi (p.734), Paitāmaha (p.724, 742), and Suśruta (p.716, 717), while also many persons are mentioned who were opponents or advocates of a non-vegetarian diet. The opponents are Paśupati, Bṛhaspati, Gautama, Agniveśya, Hastacārīn, Vādbali,⁷⁸³ Rājaputra, Gārgya, Bhārgava, Bhāradhvaja, Pālākāpya, Viśāla, Kauśikaputra, Vaidarbhya, Nara, Nārada, Kumbhadatta, Vibhāṇḍaka,⁷⁸⁴ Hiraṇyākṣaka, Pārāśara, Kauṇḍinya, Kāthāyina, Tittira, Taitilya, Māṇḍavya, Śibā, Śibi,⁷⁸⁵ Bahupatra, Arimeda, Kāśyapa, Yajñavalka, Mṛgaśarman, Śābāyana, Brahmā, Prajāpati, the Aśvins, Surendra, and Dhanvantari (p.720); the advocates are Viśvāmitra, Gautama, Kāśyapaputra, Pāṇḍya, Caraka, Bhikṣu and Tāpasa (p.727). Ugrāditya states in the same chapter (p.724–725) that a king of Avanti, called Prṣadvant, introduced the slaughter of cows.⁷⁸⁶

The *Kalyāṇakāraka* is quoted in the *Vīrasīṃhāvaloka*⁷⁸⁷ and Revanārādhyā's *Smaratattvaparakāśikā*;⁷⁸⁸ it is referred to in Pūrṇasena's commentary on the *Yogaśataka*, Revanāsiddha's *Vīrabhaṭṭīya*, and Ṭoḍara's *Āyurvedasaukhya*.

Ugrāditya is mentioned in the *Vaidyāśāstrapravartakācāryanāmasamuccaya*.

Special features

One of the most conspicuous features is the unprecedented arrangement of the diseases. Noteworthy elements in the field of nosology are, moreover: rakta, vāta and pitta types of asṛgdara (8.30);⁷⁸⁹ rūkṣa- and snehajvara (8.78–79); the mention of rakaśa (11.64), parisarpa and visarpaṇa (11.67) among the kṣudrakuṣṭha group;⁷⁹⁰ the description of śarkarāśūla (13.5),⁷⁹¹ bṛhadvraṇa (13.57), and āmaśoṣa (14.29);⁷⁹² the mention of a type of upadarṣa called vaṃśākhyāśoṣa (14.7);⁷⁹³ the absence of śūkadoṣa types (14.8); the description of the disorder usually called jālagardabha⁷⁹⁴ under the name of jālakāla (14.42); a number of sixty-six mukharogas (15.118);⁷⁹⁵ the description of virasaroga (16.27);⁷⁹⁶ the presence of a raktaja type of svarabheda (16.59);⁷⁹⁷ the dissociation of praviśyā (16.87–95) from the nāsāroga group; the absence of the vidvighāta and bastikuṇḍala types of mūtrāghāta;⁷⁹⁸ the absence of the śukraja type of mūtrakṛcchra;⁷⁹⁹ visphoṭa as a variety of masūrikā (18.32); the employment of the term sphoṭamasūrikā (18.50);⁸⁰⁰ the disease which is usually designated as makkalla goes under the name of markala (23.33).

Disorders left unmentioned are pāṇtyaya, bhagna, and the bālarogas, with the exception of the bālagrahas, as well as all the diseases added by Mādhava, with the exception of visphoṭa and masūrikā, namely āmavāta, śūla, medoroga, śītapitta, amlapitta and yonikanda, and also those added by Vṛnda, namely snāyukaroga and vardhma.⁸⁰¹

Bālagrahas dealt with are: kinnara⁸⁰² (18.71–76), kiṃpurusa⁸⁰³ (18.77–81), Garuḍa (18.82–84), Revatī (18.85–88), Pūtanā (18.89–94), Anupūtanā (18.95–99), Śītapūtanā (18.100–104), piśāca (18.105–108), and rākṣasa (18.109–113).

Grahas mentioned are devas, asuras, gandharvas, yakṣas, bhūtapitars, rākṣasas, piśācas, and nāgas⁸⁰⁴ (18.115–126).

The chapter on alchemy (24) mentions three chief processes: parimūrchana, māraṇa and bandhana; the mercurial products resulting from these processes are suitable to the curing of diseases, the acquisition of wealth, and the acquisition of an incorruptible body respectively (3–4). Other subjects dealt with in this chapter are mūrchana and māraṇa (5), bandhana (9), śodhana (13–14), rañjana (15; 39; 42), garbhadruti (16; 26), svedana (17; 42), sāraṇā (35; 39; 42), sāraṇatāila (35), krāmaṇa (36; 54), pratīsāraṇā (37; 39), anusāraṇā (38), and vedha (40). A series of eight processes (mahāṣṭakarmān) is referred to (43).

The dolāyantra is mentioned (17) and two types of mūṣā, the vajramūṣā (20) and the gostanamūṣikā (32; 33).

The ritual preceding alchemical operations includes paying homage to Jinendra, the Adhivēvatās, Yakṣeśvara, Ambikā, Kūṣmāṇḍinī,⁸⁰⁵ the Lords of the three worlds, all the Jinas, and the nine grahas (11–12).

The chapter on kalpas (25) describes kalpas of harītakī (3–4), āmalaka (5), triphalā (6–11), śilājatu (12–23), vāmyeṣā (24), pāṣāṇabheda and bhallāta (25–30), kharparī (31–32), vajra (33–35), mṛttikā (36),⁸⁰⁶ goṣṛṅgī (37), eraṇḍa (38), nāgī (39), kṣāra (40–42), and citraka (43–44).

Ugrāditya distinguishes three groups of vegetables not found in other works: pañcalavaṇīgaṇa, growing on the seashore, consisting of kukkuṭī, lavaṇī, masūrapattra, rāṣṭrikā, and yugmaparṇī (4.36); pañcabhṛatī, consisting of adhomāninī, arka, bhṛatī, citralatā, and vyāghrī (4.37); pañcavallī, consisting of kāravellī, kaṭukikā, mārjārapādī, paṭola, and tiktabimbalatā (4.38).

Remarkable names of medicinal plants used in the *Kalyāṇakāraka* are:⁸⁰⁷ adhomāninī (4.37), araka or āraka (19.30), ārāmodbhavaśītaśītalikikā (24.46),⁸⁰⁸ āraṇyālu (4.29), arśoghñī (4.29),⁸⁰⁹ bāṣpotpāda (4.31),⁸¹⁰ bhaṅga or bhaṅgā (16.66),⁸¹¹ bhrgu (4.34), bhūkarṇī (4.29), bhūkūṣmāṇḍa (6.39),⁸¹² bhūṣarkarā (4.29),⁸¹³ bhūśirīṣa (10.11), bhṛacchagalikā (4.31),⁸¹⁴ buja (17.55), cillataru (19.31), citralatā (4.37),⁸¹⁵ dalitā (4.34), dravaṇikā (4.32), goṣṛṅgī (25.37),⁸¹⁶ guhyākṣī (4.33), guptābīja (6.39), gṛdhṛā (4.39), hastikarṇī (4.29; 25.38),⁸¹⁷ jaṅghāruḥā (24.46), jharasī (4.32), kākālatā (18.103),⁸¹⁸ kākavallikā (18.94),⁸¹⁹ kāṇakālī (23.102), kandalakandaka (17.18),⁸²⁰ kaṇikā (4.29),⁸²¹ kāñjīra (8.66; 13.65; 13.87), kanyā (4.35),⁸²² kapi (17.55),⁸²³ karavandī (4.42),⁸²⁴ karmaraṅga (4.43),⁸²⁵ kharakarṇikā (25.39),⁸²⁶ kṛtaka (19.30), kṣīrakañcuka (12.15), kuci (24.5), kuṇḍalatā (4.31), kuṇḍalī (4.29),⁸²⁷ lavalī (11.116; 15.287), lavaṇī (4.33 and 36),⁸²⁸ mācīlatā (4.32),⁸²⁹ mahānīlikā (23.102), mārjārapādī (4.38),⁸³⁰ matsyākṣī (4.34; 9.26; 24.46),⁸³¹ meghaninādikā (24.45),⁸³² muratīkā (4.29), nāgī (25.39),⁸³³ namalīkā (4.29), nṛtyakāṇḍa (13.32; 16.12), pānikacarī (4.32), pañjikā (4.31), pecu (15.20),⁸³⁴ phaṇī (4.33),⁸³⁵ prabhu (17.55), putrinī (4.32),⁸³⁶ raktaśvattha (6.36), rāṣṭrikā (4.36),⁸³⁷ revatīnetra (4.39), śailabilva (4.44), samkṣīrinī (24.45),⁸³⁸ śaravārīnī (24.44), sarpākṣī (24.44),⁸³⁹ śaśaśīras (4.30), śolī (4.34),⁸⁴⁰ śukamukha (14.33),⁸⁴¹ sukhāhva or sukhāhvā (13.87),⁸⁴² talapoṭaka (16.13), tālī (2.29; 18.133), tanvī (23.96),⁸⁴³ taralīkā (4.34), toraṇa (4.44), tulakī (4.44), tumbikā (19.30), urupuṣpa (4.41), vahā (4.31), vajravallī (18.26), vajrī (15.286),⁸⁴⁴ vajrīlatā

(4.30; 18.17), vaṃśinī (4.34), vamyēṣā (25.24),⁸⁴⁵ veguṛḍikā (4.33),⁸⁴⁶ vijālinī (15.9),⁸⁴⁷ viṣadalikā (19.30),⁸⁴⁸ and vyāghātaka (10.11).⁸⁴⁹

The author

Ugrāditya⁸⁵⁰ mentions his name twice (25.53 and at the end of the hitāhita chapter) and informs us that he was instructed in medicine by Śrīnandin⁸⁵¹ or Śrīnandyācārya (20.84; 21.3; 25.51), at whose request he wrote the *Kalyāṇakāraka* (25.51–52) on the Rāmagiri mountain⁸⁵² in Veṅgi, situated in the country of Trikaṇḍa (20.87; 21.3). The name of one of Ugrāditya's colleagues was Lalitakīrti.⁸⁵³

Ugrāditya was a Digambara Jain and belonged to the Deśīgaṇa, Pustakagaccha,⁸⁵⁴ Pansogavallīśākhā of the Mūlasaṅgha,⁸⁵⁵ of the line of Kundakunda.⁸⁵⁶ The presence of monks belonging to the Deśīgaṇa in the above-mentioned part of India is proved by a tenth-century inscription from Udayagiri-Khaṇḍagiri.⁸⁵⁷

Date

Ugrāditya states that his teacher, Śrīnandin, was the guru of king Viṣṇurāja Parameśvara (25.51) and that he himself delivered his discourse in defence of vegetarianism at the court of Nṛpatuṅgavallabha Mahārājādhirāja amidst an assembly of learned men (end of the hitāhita chapter).⁸⁵⁸

The Nṛpatuṅga is identified as the Rāṣtrakūṭa king Amoghavarṣa I (A.D. 814 to about 880);⁸⁵⁹ Viṣṇurāja is identified as the Eastern Cālukya king of Veṅḍi, Viṣṇuvardhana IV (A.D. 764–799),⁸⁶⁰ or Kali Viṣṇuvardhana V,⁸⁶¹ or the father of Amoghavarṣa I, Govinda III (A.D. 793–814).⁸⁶² Hence Ugrāditya may have lived in the Deccan in the first half of the ninth century.⁸⁶³

The remarkable fact remains that no influence from the side of the *Mādhavanidāna* can be detected in his work.⁸⁶⁴ The developed state of alchemy in a treatise from the ninth century can only be explained by assuming that this science originated in Southern India and spread from there to the northern parts of the country much later.⁸⁶⁵

The terminus ante quem depends on the chronological position of Revanārādhyā, who quotes the *Kalyāṇakāraka*. R. Schmidt⁸⁶⁶ was of the opinion that this author may have lived in the thirteenth century at its earliest.

Chapter 2

Authors and works from the period A.D. 1000–1500

The *Abhidhānaratnamālā*

The *Abhidhānaratnamālā*,¹ also called *Ṣaḍrasanighaṇṭu*,² is an anonymous lexicon that only gives synonyms of medicinal substances.³

Contents

The work is arranged in six chapters (skandha), corresponding to the six tastes, madhura, amla, lavaṇa, tikta, kaṭu, and kaṣāya, with respectively 76, 21, 6¹/₂, 110¹/₂, 62, and 107 verses.⁴ This new type of arrangement provided the treatise with its second title.⁵ After enumerating all the items of a group at the beginning of a chapter, the author gives synonyms of each drug. With regard to its contents the work is related to the *Aṣṭāṅganighaṇṭu*.⁶

The *Abhidhānaratnamālā* is quoted by Mallinātha in his commentary on Māgha's *Śiśupālavadha*.⁷

A commentary on the *Abhidhānaratnamālā*, called *Padarocanī*, was written by Veṅkaṭārya or Veṅkaṭapatipaṇḍita.⁸

Special features

Noteworthy names of medicinal plants are: ādārī (4.96a); ajjhaṭā (4.78c); āramaśītalā (= kukkuṭamardaka, 4.97ab); brahmadaṇḍī (= avākpuṣpī, 5.59c); brāhmaṇayaṣṭikā (= padmā, 4.29b); cāṇakya (5.31a); ḍolāphala (1.23a); haladī (= haridrā, 4.18ab); huṃkāra (= bahukaṇṭaka, 6.53d);⁹ jala jambū (= nādeyī, 6.23cd); jharasī (4.98cd);¹⁰ jharjharā (6.50ab); kabarī (= kākolī, 1.13ab; = hiṅgupatṭrī, 5.58a); kacchurī (6.62c); khaṭvā (1.51d);¹¹ lavaṇī (= kaṅguṇī, 4.53c; = tīkṣṇapatṭrā, 6.72a); mahākadamba (6.56a); maheraṇarasā (= śallakī, 6.56cd–57ab); nadīkāntā (= prācībalā, 5.61a);¹² nahikā (= śukanāsā, 4.105cd); papphaṇa (= vṛkadhūmaka, 6.50b); sālāma (5.31c); sidhakra (6.51); śṛṅgarīṭī (= poṭaḡalā, 1.19c); sṭhalaśṛṅgāṭaka (1.38d); talapoṭaka (6.64d); turyapiṇḍī (6.73a); vajravallī (= śṛṅkhalā, 5.59b); vāsantī (5.55a); vaṭapattrikā (= mohinī, 4.106); vātaṅginī (6.66); vijayā (= bhaṅgī, 4.74a); yakṣadṛś (= kuberākṣī, 4.28ab).¹³

Rudrākṣa is regarded as a synonym of pārvata (2.19c).¹⁴ Musk (5.45) and civet (5.46a) are known to the author of the *Ṣaḍrasanighaṇṭu*. Mercury is elaborately described (6.101–103), but opium is absent.¹⁵

The author

At the end of one MS,¹⁶ the work is said to have been written by the elder brother of Caturaracita (-rakṣita?).¹⁷ More information about the author is not available.¹⁸

Date

The lower limit is provided by the quotations from the *Abhidhānaratnamālā* in Mallinātha's commentary on the *Śiṣupālavadha*. Hence the work cannot be later than the early fifteenth century. Its affinity with the *Aṣṭāṅganighaṇṭu* may indicate that it is posterior to about A.D. 800–1000.

Amṛtanandin

Amṛtanandin, a Jain who lived about A.D. 1300, composed the *Akārādi(vaidya)nighaṇṭu*, also called *Dhanvantarinighaṇṭu*.¹⁹

Avadhānasarasvatī

Avadhānasarasvatī,²⁰ of Atri- or Ātreya-gotra, a resident of Maksikāraṇya in Tuṇḍī-ramaṇḍala,²¹ son-in-law of Kāmeśanātha who was the son of Ekāmranātha,²² and father of Venkaṭeśa,²³ wrote (1) the *Prāśastauśadhasaṃgraha*²⁴ and (2) a *(Vaidya)śata-śloki*.²⁵

The *Prāśastauśadhasaṃgraha*²⁶ is a collection of recipes in 120 verses. The arrangement of the diseases and some other topics is as follows: jvara (2–3), raktapitta (4), pradara (5), asthisrutī in women (6),²⁷ kāsa, śvāsa and hidhmā (7–9), kṣaya (10–11), arocaka (12), vami (13), mūrchā (14), tṛṣṇā (15), saṃnyāsa (16–17ab), arśas (17cd–19), udāvarta (20), atisāra (21–22), grahaṇī (23–24ab), agnimāndya (24cd), viṣūci (25), prameha (26–27), mūtrakṛcchra (28), pramehapiṭikā (29), aśmarī and śarkarā (30), somaroga (31), vidradhi (32), stanavidradhi (33), vṛddhi (34–36), raktagulma (37), śūla (38), udara (39), pāṇḍuroga (40), kāmālā (41), śoṭha (42), visarpa (43), masūrikā (44), śītapitta (45), kuṣṭha (46–47), śvitra (48), kṛmi (49), vātavyādhī (50–51), pittavikāra (52–53), kaphavikāra (54), vātarakta (55), āvṛti (56–57),²⁸ sthaulya (58), vandyāṭva (59), garbhiṇīroga (60–61),²⁹ bālagrahas (62–63), bhūtas (64), unmāda (65), apasmāra (66), netraroga (67–70), karṇaroga (71–73), nāsāroga (74), oṣṭharoga (75), gaṇḍamālā (76), dantaroga (77), jihvāroga and tāluroga (78), mukharoga (79), śīroroga (80–81), vraṇa (82–83), sadyovraṇa (84–85), bhaṅga (86), bhagandara (87), granthi (88), ślīpada (89), arbuda (90), vraṇa (99), nāḍīvraṇa (92), kṣudraroga (93–94), upadaṃśa (95), yoniroga (96), sthāvaraviṣa (97), jaṅgamaviṣa and sarpaṇiṣa (98–100), kīṭaviṣa (101), vṛścikaviṣa (102–103), lūtāviṣa (104), unduruviṣa (105), alarkaviṣa (106), nakhadantaviṣa (107), vyaṅga and lāñchana (108), koṭha (109), vājīkaraṇa (110–112), rasāyana (113–115), general prescriptions (116–118).

This order does not agree with that of the *Mādhavanidāna*, but may have been influenced by the arrangement found in the works ascribed to Vāgbhaṭa.

The *Śataśloki* is described as a short treatise of 126 verses on simple ways of curing diseases³⁰ or as a manual of materia medica.³¹

Since Ekāmrānātha lived in the fourteenth century, Avadhānasarasvatī can be assigned to the later part of the same century or the beginning of the fifteenth.³²

Ballāladeva

Ballāladeva was the author of a *Yogamuktāvalī*³³ in 759 verses. He did not adopt Mādhava's arrangement of the diseases. The treatment of masṭirikā and śitalikā is dealt with in his work.³⁴

The author is supposed to be identical with Ballālasena, a famous king of the Sena dynasty of Bengal.³⁵ This king, usually called Ballālasena, and his son, Lakṣmaṇasena, are credited with five works on dharmaśāstra and related subjects; well-known is their *Adbhutasāgara*, a treatise on omens and portents.³⁶ Ballālasena's literary activity must be placed in the third quarter of the twelfth century.³⁷

A *Vaidyakaśārasaṃgraha* is attributed to an author of the name Ballāla.³⁸

Bharadvāja

Bharadvāja is the reputed author of (1) *Bheṣajakalpa*, (2) *Bharadvājakalpa*,³⁹ (3) *Bhāradvājīya* or *Bharadvāja*,⁴⁰ and (4) *Rasapradīpikā*.⁴¹

The *Bheṣajakalpa*,^{42 43} attributed to Bhāradvāja,⁴⁴ is, as its name implies, a treatise on pharmaceutics.

Contents

The text of the *Bheṣajakalpa*, which formed part of a larger work called *Āyurvedasudhānidhi*,⁴⁵ has 525 verses⁴⁶ and deals with many aspects of Indian pharmaceutics.

The main subjects are: the types of country (3–10); the varieties of soil according to the mahābhūta which predominates in it (11–23ab); rules for the collection of drugs (23cd–45); drugs consisting of bulbs or tubers (46–48ab), roots (48cd–50ab), root bark (mūlatvac; 50cd), bark (dārutvac; 51–52ab), heartwood (sāra; 52cd–53ab), leaves (53cd–57ab), flowers (57cd–59ab), fruits (59cd–61), seeds (62–65), caustics (kṣāra; 66–69), milky juice (70), resinous substances (niryāsa; 71–73), and whole plants (sarvāṅga; 74–75), time limits for their use (78cd–80ab) and rules for their preservation (80cd–82); the construction of an ārogyasālā and the erection of images in it (83–102ab); series of drugs to be employed when still fresh (102cd–104) and roots to be used together with or without their bark (105–108ab); substitutes for particular drugs (108cd–131); weights and measures (132–217); the five types of kṣāya (218–312ab); medicinal oils and fats (312cd–386); the preparation of haritakī fruits (abhayāpāka; 463cd–494); the purification of guggulu (495–499ab); the preparation of caustics (499cd–508); general rules for the administration of medicines (509–524).

Names of authorities referred to or quoted are Ātreya (216; 412cd–413ab),

Bhāluki (260), Bhoja (215; 261–270), Caraka (177), Kharanāda (187), Kṛṣṇātreya (276cd–283), Ravigupta (286cd–287), Śālihotra (163cd–165), Śaunaka (313b–331), and Suśruta (186; 284–286ab; 361cd–362).

A *Bheṣajakalpa* is mentioned as a source in the *Basavarājīya* and *Ratnākaraśadhayogagrantha*.⁴⁷ A *Bheṣajakalpa* is referred to in Revanāsiddha's *Virabhāṭīya*.

Veikaṭeśa, the son of Avadhānasarasvatī,⁴⁸ of Ātreya gotra,⁴⁹ who lived in the fifteenth century, wrote a commentary on the *Bheṣajakalpa*.⁵⁰ This commentary is said to quote from numerous authorities, such as Bhāluki, Bhoja, Caraka, Kṛṣṇātreya, Śaunaka, Suśruta, and others.⁵¹ The same Veikaṭeśa composed a medical treatise called *Praśnottararatnamālā* and a work on metrics called *Vṛttaratnāvalī*.⁵²

Maṅgalagiri Sūri, of Gelavaṅgala family and Ātreya gotra, son of Jagannātha, wrote a commentary on the *Bheṣajakalpa*, called *Sarvāṅgasamjivani*, but also sometimes referred to as *Bheṣajakalpasthāna* or even *Kalpasthāna*.⁵³

Special features

The sādharmaṇa type of country is divided into two varieties according to the predominance of jāṅgala or ānūpa elements in it (10); the rules about doubling the quantity of fluids in recipes are elaborately described according to the views of several authorities (170cd–202); two varieties of fluid substances (sāma and nīrāma) are distinguished (199cd–202), because the rules for doubling the quantity do not apply to the second variety; a māgadha type of prastha is mentioned, used in human medicine, and a laukika one, measuring only half of it, which is employed in veterinary medicine (208cd–211ab); the kālīṅga measures are absent; the number of palas making one prastha is moreover said to depend on the type of substance employed (211cd–217); religious rites which should accompany the preparation of medicines are often described (240–243ab; 339–344; 364cd–373ab; 377cd–388); two varieties of aṛiṣṭa are described, lehya and peya (390cd–391); astrological elements are prominent among the rules for determining the appropriate time of ingesting a medicine (520–524).

Noteworthy substances of the materia medica are: apenaka (73), arimedadvaya (73), balāpañcaka (48),⁵⁴ barbara (124), barbarā (48),⁵⁵ barbaradvandva (68),⁵⁶ barbaradvaya (115), bhañjī (54),⁵⁷ brahmabhūruha (114),⁵⁸ harimañjarikā (53),⁵⁹ jhilli (53),⁶⁰ kiṃśukadvandva (51), lakṣmīrdvitaya (56), lavaṅgaka (51),⁶¹ lavaṇī (55), mehāri (72),⁶² nagnaṇit (62),⁶³ patrasnuh (70),⁶⁴ puṣya (57),⁶⁵ śaṅkhiṇiyugma (63), sināṇikā (112),⁶⁶ śvetabarbara (124), śyonāka and kaṭvaṅga as two different plants (50–51), takkola (64), talapoṭa (55),⁶⁷ toraṇa (61),⁶⁸ upānadaṅghri (54),⁶⁹ varakanyā (67), varakanyakā (70), and varāla (59 and 110).⁷⁰

The author

Some medical works may have been ascribed to Bharadvāja because an ancient sage of this name is mentioned in the *Caraka*-, *Bhela*-, and *Kāśyapaśaṅhitā*, as well as in the *Aṣṭāṅgasamgraha*, but the works attributed to him must have been composed or compiled at a much later date than those mentioning Bharadvāja as an ancient authority.

Date

Since the *Bheṣajakalpa* (73: apheṇaka) and the *Rasapradīpikā* (chapter two) both mention opium, it is impossible to assign these works to a period much anterior to about 1200. The reference to a group of five balās (balāpañcaka: 10) and other features of the materia medica of the *Bheṣajakalpa* seem to confirm this upper limit, while the lower limit is provided by the date of Veṅkaṭeśa's commentary.

Bhoja

Bhoja is credited with the following medical works: (1) *Cārucaryā*,⁷¹ (2) *Rājamārtaṇḍa*,⁷² (3) *Rājamṛgāṅka*,⁷³ (4) *Āyurvedasarvasva*,⁷⁴ (5) *Viśrāntavidyāvinoda*,⁷⁵ and (6) *Rasarājamṛgāṅka*.⁷⁶ A *Bhojarājānighaṇṭu*, recorded by some authors,⁷⁷ appears to be the same as Bhoja's *Nāmamālikā*,⁷⁸ which is not a nighaṇṭu in the medical sense. A treatise called *Śālihotra*, attributed to Bhoja, deals with horses.⁷⁹ An *Āyurvedarasāyana*,⁸⁰ *Vaidyasamgraha*⁸¹ and *Yogasārasamgraha*⁸² are also attributed to Bhoja.⁸³

(1) The *Cārucaryā*^{84,85} is a treatise on personal hygiene and daily regimen (dina- and rātricaryā, with some elements of ṛtucaryā), intended for use by the royal court.⁸⁶ The author makes clear that his work will deal with elements of nīti-, vaidya-, and dharma-śāstra.⁸⁷

The number of verses in the MSS and editions varies considerably.⁸⁸ The majority of the stanzas are in anuṣṭubh metre, but longer metres are occasionally also employed.⁸⁹

A considerably enlarged version of the *Cārucaryā*, represented by a Mysore MS, has been current in Southern India.⁹⁰

The following subjects are dealt with: śaucavidhi (micturition and defecation early in the morning; 2), prātaḥkāladarśanāni (auspicious things to be seen first on getting up; 3–4),⁹¹ dantadhāvanavidhi (brushing the teeth; 5–44), gaṇḍūṣavidhi (the use of gargles; 45–49), netrapañcāmṛta (hygiene of the eyes; 50), abhyaṅga (the application of oils to the body; 51–82), snānavidhi (bathing; 83–91), udvartana (massage; 92–93), anuṣṭhānāni (religious observances after bathing; 94–98), vastradhāraṇa (the wearing of different types of clothing; 99–146), bhūṣaṇadhāraṇa (the wearing of ornaments; 147–172), puṣpadhāraṇa (the wearing of flowers; 173–238), lakṣmīkarāṇi (things leading to prosperity; 239–243),⁹² alakṣmīkarāṇi (things leading to misfortune; 244–256), lepa (unguents; 257–332), bhojana (articles of food; 333–380), ambupāna (the drinking of water; 381–419), dhātupariṇāma (metabolic changes of food; 420–432), pātra (vessels; 433–457); the tāmbūlādhikāra (458–603) is on betel chewing, the prakīrṇādhikāra (604–665) on various subjects (mirrors, fans, vehicles, beds, incense, etc.), and the strīsevāprakarāṇa (666–736) on sexual intercourse; the last section, called nītivākyāni (737–784) is about general rules of conduct.

The text of the *Cārucaryā*, as established by B. Rama Rao, cannot possibly be regarded as the original one, since it quotes the *Bhāvaprakāśa* (724–728),⁹³ dating from the sixteenth century. The only other treatise quoted by name is the *Samgraha* (509), probably the *Aṣṭāṅgasamgraha*, whereas citations from unspecified sources,

introduced by anyat, anyamatam, granthāntare, matāntaram, matāntare, and pāthāntare are quite numerous. Some of these unspecified quotations recur in the *Bhāvaprakāśa*.⁹⁴

Bhoja's *Cārucaryā* is quoted by Rāmacandra Budhendra in his commentary on Bhartṛhari's *Subhāṣitatrīṣaṭī*.⁹⁵ Several texts contain verses found in the *Cārucaryā* or very similar ones.⁹⁶

A *Cārucaryā* ascribed to Dhanvantari⁹⁷ may prove to be the same as that by Bhoja.

(2) The *Rājamārtanḍa*^{98,99} is a yogasamgraha, a collection of therapeutic prescriptions, mostly consisting of a restricted number of vegetable drugs.¹⁰⁰

The work contains 405 verses in various metres, arranged in thirty-four short chapters (adhikāra). The order of these chapters, each of which is concerned with a disease or group of diseases, is peculiar to this work. Chapters on śālākya come first (1–5), followed by kāya and śalya (6–27), bhūtavidyā (28), agadatantra (29), kṣudraroga (30), kaumārābhṛtya (31–32), rasāyana and vājikaraṇa (33), and finally paśuroga (34). Noteworthy is the absence of rasayogas among the recipes.

The *Rājamārtanḍa* is quoted by Anantakumāra (under the title *Rājamārtanḍīya*),¹⁰¹ Rājeśvaradatta Miśra in his *Svasthavṛttasamuccaya*, Rāmacandra in his *Rāma Vinoda*,¹⁰² Śivamiśra in his *Vaidyaśāstraśivānubhava*, in Trimalla's *Yogataraṅgiṇī*,¹⁰³ and *Bṛhadyogataraṅgiṇī*,¹⁰⁴ and in the *Yogaratnākara*.¹⁰⁵ Bhoja's *Rājamārtanḍa* is one of the sources of Hariprapanna's *Rasayogasāgara*. One verse is found in the *Rasaratnasamuccaya*.¹⁰⁶

A separate chapter is devoted to stanaroga (6); it also contains prescriptions which make the female breasts firm and large. Separate chapters deal with pādaroga (23), and with carmakīla, together with maṣa (24). The chapter on kṣudraroga (30) does not form part of the series on śalya. The chapter about eye diseases has also verses on kāmālā (3.18–20), that about diseases of the oral cavity and throat (mukharoga) on gaṇḍamālā (5.29–30 and 32) and apacī (5.31), that about udara has a verse on kṛmī (7.7), and that about vātaroga on asthibhaṅga (22.5). The new diseases, described for the first time by Mādhava, Vṛnda and Vaṅgasena, are for the greater part absent, apart from śītapitta (8.12). The disease called śītalikā is mentioned in the kṣudraroga chapter (30.2–5). The kuṣṭha chapter contains a prescription against aṅghridadru, a mycotic affection of the feet (8.3), and one against rakasa (8.4). The disease, usually called vṛddhi, goes under the name kuraṇḍa (17.1 and 5–7). Rather unusual is the addition of a chapter on veterinary science (34),¹⁰⁷ dealing with disorders in cows, buffaloes, horses and mules, and with determining the colour of the offspring of pigeons. A similar chapter forms part of the *Haramekhalā*. Both works refer to a disease in horses and mules called jalasphoṭa in the *Rājamārtanḍa* (34.14) and vārisphoṭa in the *Haramekhalā* (4.411).

Noteworthy names of plants¹⁰⁸ are ārāmaśṛgālikā (31.39),¹⁰⁹ asthisamghātikā (22.5),¹¹⁰ āvallikā (26.13),¹¹¹ babbūla (14.1), bhūkuruvaka (34.11),¹¹² cakrāṅka (3.9),¹¹³ gopālapīṭha (26.8),¹¹⁴ goṣṭhāmlīkā (26.8),¹¹⁵ goṣṭhivallī (24.2),¹¹⁶ jhiñjhiñīkā (5.34),¹¹⁷ kanthārikā (29.21),¹¹⁸ māyāphala (31.44), svarnagandhā (5.21), udumbaraparṇī (31.15),¹¹⁹ and uttarīṇī (31.22).¹²⁰ Opium and Cannabis appear to be absent.

(3) The *Rājamṛgāṅka*¹²¹ is a work dealing with taila, lehya, cūrṇa, etc.¹²² It is referred to as a work on medicine by Bhoja in the introduction to the *Bhojavṛtti* on the *Yogasūtras*.

A quite different *Rājamṛgāṅka* of Bhojarāja is an astronomical treatise.¹²³

(4) The *Āyurvedāsarvasva* of Bhojarāja is quoted in Trivikrama's *Lauhaprādīpa*.¹²⁴

(5) The *Viśrāntavidyāvinoda*¹²⁵ is said to be quoted by Bhāvamīśra.¹²⁶

(6) The nature and contents of the *Rasarājamṛgāṅka*¹²⁷ are unknown.¹²⁸

The author and his date

At least two medical authors with the name of Bhoja should be distinguished: firstly an ancient authority quoted by many commentators,¹²⁹ and, secondly, the author who is usually called Bhojarāja and to whom the works are ascribed which were dealt with above.

The later Bhoja is often thought to be king Bhoja of the Paramāra dynasty, the famous patron of learning, who reigned at Dhārā (about A.D. 1000–1055) and to whom more than thirty Sanskrit technical works are ascribed.¹³⁰ It cannot be established whether at least some of these works were written by the king himself or all of them fathered upon him. Bhojarāja has also been identified with Bhoja of Chitor, who lived in the second half of the seventh century.¹³¹ A third Bhoja, of the Pratihāra dynasty, had his capital at Kānyakubja in the ninth century.¹³²

The medical works attributed to Bhojarāja may be assigned to about the eleventh century, the age of Bhoja of Dhārā, as an earlier date disagrees with the contents and materia medica of the *Rājamārtanḍa*.¹³³ The date of Appana's rendering of the *Cārucaryā* shows the thirteenth or fourteenth century to be the terminus ante quem of this work.

P. Hymavathi¹³⁴ developed the view that the Bhojarāja who was the author of the *Cārucaryā* may be the same as a poet Bhoja who was a contemporary of Divākara Sūri, the father of Lolambarāja, who lived towards the close of the thirteenth century.¹³⁵ The addition of rāja to the proper name was a common practice among brāhmaṇa scholars in Āndhra during this period. P. Hymavathi suggests that the *Cārucaryā* has been composed in the middle of the thirteenth century. He regards the *Nītibhūṣaṇa*, written in Telugu, as a work by the same author, written in this very time, because it is quoted by Maḍiki Siṅgana, who lived towards the end of the thirteenth century, in his *Sakalanīṭisammataṃ*. A third work by the same Bhoja is, according to P. Hymavathi, the *Rāmāyaṇacampū*, written in Sanskrit.¹³⁶ Finally, P. Hymavathi suggests that Bhoja's patron may have been Gaṇapatideva (A.D. 1198–1261)¹³⁷ or his daughter Rudrāmbā (Rudramadevī)¹³⁸ of the Kākātīya dynasty, or some feudal lord.

Bhojarāja is quoted in Anantakumāra's *Yogarātnasamuccaya*, Śivādāśena's commentary on the *Cakradatta*,¹³⁹ and Trivikrama's *Lauhaprādīpa*.

A recipe attributed to Bhojarāja is found in the *Kāmaratna*.¹⁴⁰

Cāmuṇḍa

Cāmuṇḍa ¹⁴¹ was the author of (1) *Jvaratimirabhāskara*, (2) *Rasasaṃketakalikā*, ¹⁴² (3) *Rasendrtilaka*, ¹⁴³ (4) *Varṇanighaṇṭa*, and (5) *Vibhramadāmbara*.

(1) The *Jvaratimirabhāskara* ¹⁴⁴ is a monograph on fevers.

The treatise consists of about 1,380 verses, arranged in sixteen chapters (adhyāya). Chapter one (jvaraprabhedha; seventy-four verses) deals with the mythical origin of fever (5–9ab), its names in a great variety of living beings and some lifeless substances (9cd–16), its general aetiology and symptomatology, its varieties and its aṛiṣṭas.

Chapter two (nādikādhbhedha; fifty-eight verses) describes the examination of the pulse (1–14) and the urine (16–26) in fever patients, the first stage of fever (taruṇajvara) and its treatment (34–58) by means of reducing measures (laighana). ¹⁴⁵

Chapter three (auśadhādhīparikrama; ninety-two verses) is about certain, chiefly fluid, medicinal preparations (kvātha, yavāgū, yūṣa, etc.), to be administered to patients with a fresh fever; chapter four (sādhāraṇajvaracikitsā; thirty-seven verses) is about the general treatment of fevers with medicines.

Chapter five (vātādhīvara; ninety-nine verses) is concerned with the symptoms and therapy of fevers caused by one doṣa, and chapter six (dvandvajvaracikitsā; sixty-five verses) with fevers caused by two doṣas.

Chapter seven (saṃnīpātajvaraprabhedha; 358 verses), the longest of the whole treatise, describes, after a general section on fevers caused by the three doṣas when acting concertedly (1–56), the symptoms and therapy of three series of thirteen varieties of these fevers. The names of all these fevers are enumerated (57–64), followed by their symptomatology and treatment. The first series consists of viśphāraṇa, śīghrakārin, puṣkalaka, vidhu, makarin, phalgu, vaidārikakarṇāhva, karkoṭaka, saṃmohaka, yāmya, krakaca, pākala, and kūṭapākala (65–140). ¹⁴⁶ The members of the second series are sandhiga, antaka, rugdāha, cittabhrama, karṇaka, kaṇṭhakubja, śītagātra, tandrika, pralāpaka, raktaśṭhīvin, bhugnanetra, jīhvaka, and abhinyāsa ¹⁴⁷ (183–305). ¹⁴⁸ The third series consists of antardāha, antaka, kumbhīpāka, paurṇāva, pralāpin, eṇīdāha, bhūtahāsa, ajaghoṣa, hāridraka, saṃśoṣin, saṃnyāsa, yantrāpīḍa, and daṇḍapāta (308–337); ¹⁴⁹ a fever called sughoraka (333–347ab) ¹⁵⁰ is regarded as a variety of saṃśoṣin.

Chapter eight (āgantujvara; thirty-six verses) is about fevers caused by a trauma and by the seven types of abhiṣaṇa, i.e., by grahas, anger, strong-smelling herbs, poisons, grief, lust, and fear; a fever arising from curses is added at the end.

Chapter nine (satatādhīvaraprabhedha; 138 verses) is concerned with the five irregular fevers which are usually distinguished (saṃtata, satata, anyedyuṣka, ṭṛṭiyaka, caturthaka), together with the reversed (viparyaya) types of the last four of the series; it adds two irregular fevers, recurring respectively every fifth (pañcāhasaṃbhava; 84–85ab) and every sixth day (ṣaṣṭhadinodbhava; 85cd–87); ¹⁵¹ vātabalāsaka (88–89) and pralepaka fever (90–92) are also dealt with in this chapter, as well as fever arising from the pollen of grasses, i.e., hay fever (tṛṇapuṣpaka; 93–97ab), ¹⁵² and fever from the loss of ojas (97cd–100ab). ¹⁵³ The therapy of the irregular fevers is found at the

end of the chapter (100cd–138).

Chapter ten (*śītādāhādi*prabheda; sixty-four verses) is about irregular fevers, caused by two *doṣas*, which are characterized by coldness (*śītajvara*; 1–22) or a burning sensation (*dāhajvara*; 22–32); these fevers are said to find their origin in evil deeds committed in previous lives; fevers beginning with a feeling of coldness (*śītādi*jvara; 33–34) or a burning sensation (*dāhādi*jvara; 35–36) are also found in this chapter, as well as those in which the body is partly cold, partly warm (the *nṛsiṃha* and *ardhanārīśvara* types, 37–42; the *antardāha* and *bahirdāha* types, 43–46ab); the chapter ends with a fever that especially occurs during the night (*rātrijvara*; 46cd–49).¹⁵⁴

Chapter eleven (*dhātugatajvara*prabheda; forty-one verses) deals with fevers affecting the seven tissues of the body, and chapter twelve (*jīṛṇajvaracikitsā*; sixty-six verses) with fevers of long standing.

Chapter thirteen (*śodhanādi*prabheda; eighty verses) is about a number of therapeutic measures: *śodhana*, *pañcakarman*, *pācana*, *sneha*, *sveda*, *vamana*, *virecana*, *nasya*, *basti*, *nīrūha*, *anuvāsana*, *varti*, *agnikarman*, and *agada*; it ends with religious therapy (*dāna*, *mantra*).

Chapter fourteen (*dvādaśa*prabheda; one hundred verses) describes the symptoms and treatment of twelve fevers: *ajīṛṇajanita*-, *dr̥ṣṭija*-, *raktaja*-, *malajanita*-, *garbhīṇī*-, *sūtikā*-, *stanarogabhava*-, *bāla*-, *viṣphoṭa*-, *śītalā*-, *krimija*-, and *kāljvara*.¹⁵⁵

Chapter fifteen (*nakṣatrādi*jvara)prabheda; thirty verses) deals with the influences of the lunar mansions (*nakṣatra*) on the outcome of fever (1–5), the four types of *kāljvara* (*raudra* = *brāhmaṇajvara*; *māhendra* = *kṣatriyajvara*; *īśvara* = *vaiśyajvara*; *kālagambhīra* = *śūdrajvara*; 6–18), which can be treated with religious measures only,¹⁵⁶ with the signs of release from fever (19–20ab), the causes of its reappearance (23–26ab), and finally with religious observances which avert all kinds of fever ((26cd–30).

Chapter sixteen (*upadravādi*prabheda; 41 verses) is about the ten complications (*upadrava*) of fever (*atisāra*, *vami*, *hikkā*, *śvāsa*, *kāsa*, *aruci*, *tr̥ṣṇā*, *mūrchā*, *vibandha*, *agnisāda*), which are described as its relatives.¹⁵⁷

The above list of contents shows that Cāmuṇḍa arranged his treatise very systematically. This also emerges from his descriptions of treatment. The therapy of the fevers caused by one *doṣa* forms a fine example of his method: details about the drinking of water are given first, followed by prescriptions regarded as *pācana*, *śamana* and *śodhana*, while *rasayogas* appear at the end. The verses on therapy of each chapter are divided into two groups, those comprising the usual *āyurvedic* preparations and those containing *rasayogas*. The recipes of the former group are partly simple, partly complicated, and sometimes provided with names, while those of the latter are usually provided with names.¹⁵⁸ The materia medica is almost devoid of conspicuous features. Religious elements, mantras included, are not infrequent in Cāmuṇḍa's therapy.¹⁵⁹

Sources are hardly referred to: Caraka, Garga, Suśruta, and *Vṛddhasuśruta* are each mentioned once.¹⁶⁰ Since a number of verses found in the *Jvaratimirabhāskara* also form part of Śārṅgadharā's *Triśatī*,¹⁶¹ the latter work has probably been used by Cāmuṇḍa.

The *Jvaratimirabhāskara* is quoted in Ananta's *Pratāpakalpadruma*, Jayaratna's

Jvaraparājaya, and Pratāpasīṃha's *Aṃṛtasāgara*. A work of the same title is mentioned in an *Auśadhikalpa*.¹⁶²

The method of examination of a patient called *aṣṭasthānaparīkṣā* was already known to Cāmuṇḍa, as appears from the beginning of chapter seven (5–10),¹⁶³ where the eight elements of this procedure are referred to, although the term itself is not yet employed.¹⁶⁴ Most of the *saṃnipāta* fevers of the second series are twice described, apparently according to two different sources.¹⁶⁵ The fever called *hāridraka* is described twice as well (7.316–320ab);¹⁶⁶ the series of fevers to which *hāridraka* belongs is said to be contagious, and fatal if provided with the complete set of symptoms (7.321cd-322); nevertheless some verses on the therapy of *hāridraka* have been incorporated in the treatise (7.325–331).¹⁶⁷ The *sughoraka* fever (7.333–346ab) is not known from other sources. It is described twice. The second and more elaborate description, said to have been taken from some other work, constitutes a conversation between Sūrya and the Aśvins. The former declares that this fever arose out of Rudra's wrath at the time of Dakṣa's sacrifice. Its five varieties are called *brāhmaṇa*, *kṣatriya*, *vaiśya*, *śūdra*, and *cāṇḍāla*. The *brāhmaṇa* fever is easily curable, the *kṣatriya* type curable with difficulty, the *vaiśya* fever even more so, while the *śūdra* and *cāṇḍāla* types are incurable. Two ways of treatment are recommended: firstly treatment by means of gifts, meritorious deeds, and paying homage to Rudra and Bhavānī, secondly by means of medicines. The verses on *vāṭabalāsaka* (9.88–89) mention that some authorities regard it as identical with the variety of jaundice called *kumbhakāmālā*.¹⁶⁸ The *pralepaka* fever is said to occur especially in patients with (*rāja*)*yakṣman* (9.90–92).¹⁶⁹ A fever caused by unwholesome water is referred to incidentally (*vāridoṣa*; 11.32). The therapy of *śītalā*, also called *pūrvāpara*, consists mostly of purely medical measures (14.73–87).¹⁷⁰

Some noteworthy names of medicinal plants are *aileya* (4.28),¹⁷¹ *ākallaka* (7.45), *bhadroktaka* (14.24),¹⁷² *cillaka* (3.73), *dāsī* (11.14),¹⁷³ *gārgī* (7.234), *pillaka* (3.73), and *poī* (3.73).

(2) The *Vaṃanighaṇṭa*¹⁷⁴ appears to be a vocabulary of Tantric terms.¹⁷⁵ This work is referred to in Śrīvallabhagaṇi's commentary on the first verse of Hemacandra's *Nighaṇṭuśeṣa*.¹⁷⁶

(3) The *Vibhramadambara*¹⁷⁷ is a work on magical tricks (*kautuka*).¹⁷⁸

The author

Cāmuṇḍa¹⁷⁹ or Caṇḍa¹⁸⁰ was a Naigama¹⁸¹ *kāyastha*,¹⁸² son of Kumbha,¹⁸³ who was a *karaṇavīra*,¹⁸⁴ i.e., a superintendent of the department of accounts and records of a king, who may have been the famous Mahārāṇā of Mewār, who was also called Kumbha. Like his father, Caṇḍa lived in Mewār,¹⁸⁵ holding the same office¹⁸⁶ at the court of the Mahārāṇā in Yoginīpattana¹⁸⁷ or Yoginīpura,¹⁸⁸ where he composed the *Rasasaṃketakalikā*¹⁸⁹ and *Jvaratimirabhāskara*.¹⁹⁰

Date

The *Rasasaṃketakalikā* was completed in A.D. 1474,¹⁹¹ the *Varṇanighaṇṭa* in 1482,¹⁹² and the *Jvaratimirabhāskara* in 1489/90,¹⁹³ 1490,¹⁹⁴ or 1492.¹⁹⁵ All three works were written during the reign of Rājamalla,¹⁹⁶ one of Kumbha's sons.¹⁹⁷

Cārucandrasūri Rudrapallīya

Cārucandrasūri Rudrapallīya wrote a medical treatise, called *Vātaśita*, in the latter half of the fourteenth or first half of the fifteenth century.¹⁹⁸

Dāmodara

Dāmodara's *Ārogyacintāmaṇi*¹⁹⁹ is a comprehensive treatise on classical āyurvedic lines. It has erroneously been regarded as a commentary on Suśeṇa's *Āyurvedamahodadhi*.²⁰⁰

Contents

The work, almost exclusively written in verse, is arranged in thirty chapters (*adhyaīya*), to which three more are added, as well as four *pariśiṣṭa* chapters. The total number of stanzas is about 1,950.

Chapters one to seven cover the subjects usually dealt with in the *sūtrasthāna* of a *saṃhitā*. After a *maṅgalācaraṇa* devoted to Śiva, the author states that his *Ārogyacintāmaṇi* is based on the words of Caraka and others. Chapter one is concerned with *paribhāṣā*, *dinacaryā*, *ṛtucaryā*, and *doṣavijñāna*. Chapter two is about the tastes and articles of food, chapter three about the groups of medicinal substances and their actions, *paribhāṣā*, weights and measures, and *lohamañḍūramāraṇa*. Chapter four deals with *sneha* and *sveda*, chapter five with *pañcakarman*, chapter six with *dhūmapāna*, *gaṇḍūṣa* and *kavala*, *pratisāraṇa*, *śirobasti*, *karṇapūraṇa*, *tarpaṇa*, and *sirāvidhi*. Chapter seven is about *aṛiṣṭas*. The colophon refers to this group of chapters as the *Sūtraśārīrākhyasthāna* of Dāmodara's *Ārogyacintāmaṇisaṃhitā*, but the matter usually treated in a *śārīrasthāna* is absent.

Chapters eight to twenty-four comprise, according to their last colophon, the two *sthānas* about *nidāna* and *kāyacikitsā*. The order in which the diseases and their treatment are described is peculiar to this text: *jvara* and *jvarātisāra* (8), *atisāra*, *grahaṇī*, *pravāhikā* and *krmiroga* (9), *aṛśas* (10), *ajīṛṇa* (11), *raktapitta* and *aśrgdara* (12), *prameha*, *pramehapiḍikāḥ*, *mūtrakṛcchra* and *aśmarī* (13), *kṣayaroga* (14), *kāsa*, *śvāsa* and *hikkā* (15), *svarabheda* and *arocaka* (16), *chardi*, *trṣṇā* and *mūrchā* (17), *pāṇḍuroga*, *halimaka* and *kāmalā* (18), *vidradhi* and *gulma* (19), *udara* (20), *udāvarta*, *śūla*, *hṛdroga* and *amlapitta* (21), *vātaroga*, *ūrustambha*, *āmavāta* and *vātarakta* (22), *kuṣṭha*, *śvitra*, *śītapitta* and *udarda* (23), *śopha*, *ślīpada* and *sthaulya* (24).

Chapter twenty-five, concerned with *śālākya*, is about *netra-*, *karṇa-*, *nāsā-*, *mukha-* and *śīroroga*, to which *palita*, *indralupta* and *dāruṇa* are added. Chapter twenty-six, concerned with *śālya*, deals with *vraṇa*, *bhagandara*, *upadaṃśa*, *granthi*, *galagaṇḍa*, *gaṇḍamālā*, *apacī*, *arbuda*, *lūtāvraṇa*, *jālagardabha*, *visphoṭa*, *masūrikā*, *tāruṇyapi-*

śakālā,²⁰¹ and valmīka. Chapter twenty-seven is about viṣa, cūrṇadāha, agnidāha, and madātyaya. Chapter twenty-eight deals with grahas, unmāda and apasmāra, twenty-nine with rasāyana and vājīkaraṇa, thirty with yoniroga, garbhaśūla, garbhapāta, sūtīkāroga, stanyadoṣa, and bālaroga.

Three additional chapters follow, concerned with bheṣajakalpa, viṣapratyauśadha and kriyākalpa. The chapter on bheṣajakalpa, i.e., the preparation of medicines, treats of general subjects related to the collection of drugs, gives a list of substitutes for drugs which cannot easily be procured, deals with weights and measures, the various medicinal preparations and the proportions of their ingredients, etc. It is the only chapter in which a series of authorities is mentioned by name: Ātreya (122), Aurabha (81), Bhoja (122, 160–169), Caraka (93, 170), Kharanāda (102), Ravigupta (184cd–185ab), Śālihotra (83–85ab), Suśruta (101, 182–184ab), and Vāluḥi (159).²⁰² The chapter on viṣapratyauśadha deals with antidotes, or rather drugs which counteract noxious effects of a rather long series of medicinal substances. The chapter on kriyākalpa, the only one in which prose occurs, is about pañcakarman.

The first pariśiṣṭa chapter, on pratyauśadhas, enumerates more drugs which counteract noxious effects of other medicines; the second, on bheṣajakalpa, gives additional rules on the preparation of medicines; the third, on kriyākalpa, contains additional information on the types of preparation called gaṇḍūṣa, kavala and mūrdhataila; the fourth consists of a long series of kaṣāyas to be used in various disorders, and in addition it presents a number of gaṇas.²⁰³

Apart from the authorities mentioned in the bheṣajakalpa chapter and the reference to Caraka in the first verse, Dāmodara only specifies his source in the kriyākalpa chapter, where two prose passages are said to be taken from the (*Aṣṭāṅga*)*saṃgraha*.²⁰⁴ More passages from this chapter were borrowed from the works ascribed to Vāgbhaṭa, though Dāmodara omitted to mention this.

Vāgbhaṭa is Dāmodara's main source according to S. Viswanatha Sarma.²⁰⁵ Nevertheless, he does not follow this authority in the arrangement of the diseases. Some of the material included in his treatise has been influenced by Vāgbhaṭa without leading to literal borrowing; this is, for instance, clearly visible in the groups (*varga*) of medicinal substances of chapter three. The gaṇas of the kaṣāyapariśiṣṭa chapter, on the other hand, are identical with those of the *Aṣṭāṅga**hṛdayasaṃhitā*.²⁰⁶

The *Ārogyacintāmaṇi* is quoted in the *Vīrasīmḥavaloka*²⁰⁷ and in Ṭoḍara's *Āyurvedasaṃkhyā*.²⁰⁸

Special features

The chapter on prognostics (7) contains two verses on pulse examination.

Noteworthy are the following features of Dāmodara's nosology: the therapy of a rakṭapittajvara is described, not known from earlier texts, the symptoms of which are omitted (8.28–30); the only specific type of saṃnipāta fever described is abhinyāsa (8.44–50); asṛgdara is dealt with in the chapter on rakṭapitta (12.18–22); mūtrāghāta is absent from the chapter on urinary disorders (13); saṃnyāsa is absent from the chapter on chardī, tṛṣṇā and mūrḥā (17); ślīpāda is dealt with in the group of chapters on kāyacikitsā (24); the therapy of palīta, indralupta and dāruṇa is described at the end

of the śālākya chapter (25);²⁰⁹ bhagna and śūkadoṣa are absent from the śālyā chapter (26), which includes masūrīkā and visphoṭa; the therapy of only three kṣudrarogas, jālagardabha, tāruṇyapīḍakāḥ and valmīka, is described in the same chapter, and lū-tāvraṇa²¹⁰ has been added; a new type of dāha, namely cūrṇadāha, is mentioned in the chapter on viśa (27), along with agnidāha, while madātaya is also relegated to this chapter; mūdhagarbha and yonikanda are absent from the chapter on women's and children's diseases (30); some more diseases are not mentioned, such as vṛddhi²¹¹ and visarpa.²¹² The presence of disorders like āmavāta, the several types of śūla, sthūlya (= medoroga), śtāpitta, āmlapitta, visphoṭa and masūrīkā betray the influence of the *Mādhavanidāna*, but some diseases added after Mādhava's time, such as vardhma, snā-yukaroga and somaroga, are absent. On the other hand it is remarkable that asthisrāva is mentioned at the very end of the work (kaśāyapariśiṣṭa 478–480).²¹³

A conspicuous feature of Dāmodara's therapeutics is the absence of rasauśadhas and the emphasis on medicinal substances of vegetable origin. Noteworthy in this context is the description of the killing (māraṇa) of maṇḍūra at the end of chapter three. The materia medica consists for the greater part of substances known from the classical saṃhitās. Some later elements are ākulī,²¹⁴ babbūlaka,²¹⁵ dhattūra,²¹⁶ khārī,²¹⁷ and maheraṇā.²¹⁸ Opium seems to be absent.

Religious therapy has been relegated to the background and has only a very minor role in possession by grahas and bālagrahas; remarkably enough, it is not even prescribed in masūrīkā.

Dāmodara's work appears to be one of the first that extensively and minutely describe, in the bheṣajakalpa chapter, many rules pertaining to the preparation of compound medicines, especially with regard to the quantities of their ingredients and the ratios of these. A detailed discussion of this subject is not found in the earlier treatises themselves but only in their commentaries.

The lists of pratyaśadhas form an unusual feature of the work.

The author

Dāmodara is said to be the son of Viṣṇubhaṭṭa in the colophons of the *Ārogyacintāmaṇi*. His father, Viṣṇu, originated from Vidarbha according to one of the MSS.²¹⁹ The text itself gives no particulars about the author and does not even mention his name.²²⁰

Date

Though it has been claimed that nothing is known about the author's time,²²¹ it is nevertheless possible to establish his chronology by taking into account that he must have lived in the same age or somewhat later than the author of the *Śārṅgadharaśaṃhitā*, because the examination of the pulse is mentioned by Dāmodara. Since Dāmodara, on the other hand, must be earlier than Vīrasīṃha who quotes him, he can be dated to the first half of the fourteenth century.²²² This is also the date proposed by P. Hymavathi, who arrived at his conclusion on quite different grounds.²²³

Several medical authors bearing the name of Dāmodara are known. Unspecified authors of this name are quoted or referred to in Ananta's *Pratāpakalpadruma*, Haṃsa-rāja's *Bhiṣakcakracittotsava*, Rāmeśvara Bhaṭṭa's *Rasarājalakṣmī*,²²⁴ Revaṇasiddha's

Vīrabhaṭṭīya, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*,²²⁵ Viṣṇudeva's *Rasarājalakṣmī*, Viṭṭhala's *Rasasindhu*,²²⁶ and in two anonymous treatises, the *Cikitsāsārasaṃgraha*²²⁷ and the *Ratnākaraśadhayogagrantha*.²²⁸

A Dāmodara is mentioned as one of the promoters of āyurveda in the *Vaidyāśāstrapravartakācāryanāmasamuccaya*.

The *Dhanvantarīyanighaṇṭu*

The *Dhanvantarīyanighaṇṭu*²²⁹ is a comprehensive lexicon of materia medica which lists both the names and the properties of medicinal substances.

Contents

The treatise consists of two parts: a Gaṇadravyāvali (69 verses),²³⁰ preceded by an introduction (19 verses), and the Nighaṇṭu in its proper sense (about 1,550 verses).²³¹

The introductory verses open with a salutation to Dhanvantari; the author states thereupon that he is going to deal with the Sanskrit and Prakrit names of those among the endless number of vegetable and other substances which are useful in medicine. He hints at the compilatory character of his work by referring to the nighaṇṭus he consulted before composing his own treatise.²³²

The Gaṇadravyāvali divides the medicinal substances into seven large groups (varga), subdivided into smaller units (gaṇa). The substances belonging to each of these gaṇas are enumerated, together with their actions and modes of employment.²³³ The names occurring in the lists of the Gaṇadravyāvali are mostly those of the first member of a series of synonyms of the Nighaṇṭu or consist of a commonly employed synonym. Exceptions to this rule are, for example, the two plants called puṇya (1.4)²³⁴ and suparṇī (1.5),²³⁵ sudhā (1.9),²³⁶ and gr̥h̥jana (4.4).²³⁷ The total number of items of the Gaṇadravyāvali is said to be 373 (7.3), but the actual number of drugs described in the Nighaṇṭu is much larger.

One of the principles governing the composition of the *Dhanvantarīyanighaṇṭu* is to regard particular drugs, listed in the Gaṇadravyāvali, as representatives of a group of substances and to describe the members of such a group separately in the Nighaṇṭu.²³⁸ either as a viśeṣa²³⁹ or in a different way.²⁴⁰ A related type of summarizing occurs especially in the lists of the sixth varga of the Gaṇadravyāvali: taila (6.7) refers to many kinds of oil, payas (6.7) to both milk and dadhi, etc. At the end of the sixth varga the Gaṇadravyāvali is said to have been expounded by Dhanvantari,²⁴¹ a statement that one expects to occur at the end of the seventh varga. This may imply that the seventh varga is a later addition,²⁴² the more so since the Gaṇadravyāvali omits to mention a large part of its contents.

The Nighaṇṭu, which deals with the synonyms of each drug and its properties and actions, follows the Gaṇadravyāvali in arranging the medicinal substances into seven large groups:²⁴³ (1) guḍūcyādivarga, drugs which eliminate one or more of the doṣas; (2) śatapuspādivarga, mainly consisting of spices; (3) candanādivarga, consisting of fragrant substances; (4) karavīrādivarga, containing various plants; (5) āmrādivarga, fruit-bearing trees; (6) suvarṇādivarga, describing metals, minerals,

girisindūra, hiṅgula, bodāśaṅga (7.94–95).³²⁹

The author

The *Dhanvantarīyanighaṇṭu* does not mention its author. As referred to before, a verse at the end of the *suvarṇādivarga* of the *Gaṇadravyāvali* states that it emanated from the mouth of Dhanvantārī. It is probably for this reason that the treatise became known as *Dhanvantarīyanighaṇṭu*, and that the verses from it are quoted as spoken by Dhanvantārī. Some MSS ascribe the work to Mahendrabhogika, resident of Sthāṇvīśvara³³⁰ and son of Kṛṣṇabhogika.³³¹

Date

One of the problems connected with the date of the *Dhanvantarīyanighaṇṭu* is whether the treatise as it is known to us represents a revised and enlarged version of an earlier text, called *Dravyāvalī*,³³² that contained the *Gaṇadravyāvali* and the series of synonyms of the Nighaṇṭu only, and that has gradually developed into the *Dhanvantarīyanighaṇṭu* as it is now.³³³ It has also been suggested that this process of growth continued for a long time, resulting in the incorporation of drugs that became current in later periods.³³⁴

Various arguments have been put forward in support of this thesis. One of these is that, at the end of the *Gaṇadravyāvali*, the author states that, the *Gaṇadravyāvali* being completed now, he is going to enumerate the synonyms in due order. Instead of doing so, a renewed salutation to Dhanvantārī follows, accompanied by an introductory verse mentioning the author's intention to describe the qualities and actions of the medicinal substances. It is remarkable indeed that the author, in his introductory verses, refers to his work as the *Dravyāvalī*, which is said to consist of a *Gaṇadravyāvali* and a series of synonyms, while allusions to the medicinal properties also occur in the introduction; their description is even an essential element of the *Gaṇadravyāvali*. The argument is therefore not convincing, but it remains to be explained why the series of synonyms from the *Dhanvantarīyanighaṇṭu* are quoted by later authors, whereas the verses about the properties of the drugs seem to have been less appreciated or less well known.³³⁵ The problem whether an earlier *Dravyāvalī*, of a structure similar to that of the *Aṣṭāṅganighaṇṭu*, has existed or not, depends in my opinion on a thorough study of all the manuscripts available.

Important too are the quotations from a *Dravyāvalī*. Authors and works citing from it are: Āḍhamalla, Anantakumāra,³³⁶ the *Bhesajjamañjūsāsanaya*, Candratā's *Yogaratanasamuccaya*, Mallinātha's commentary on the *Amarakoṣa*,³³⁷ Niścalakara's *Ratnaprabhā*,³³⁸ Śivādāsasena's commentary on the *Cakradatta*,³³⁹ and Śrīkaṇṭhadatta's *Kusumāvalī*.³⁴⁰

An argument in favour of the thesis that the *Dhanvantarīyanighaṇṭu* was subject to a process of gradual growth, resulting in accretions of a later date, is based on Kṣīrasvāmin's acquaintance with it. It has been suggested that an earlier version must have existed, since the treatise in its present shape, describing, for example, opium and zinc, cannot possibly date from the first half of the twelfth century,³⁴¹ the period in which Kṣīrasvāmin lived.³⁴² The structure of the *Dhanvantarīyanighaṇṭu*, especially its deal-

ing with many drugs as varieties of some basic substance, facilitated undoubtedly the inclusion of later additions.³⁴³

The date of the *Dhanvantarīyanighaṇṭu*, at least its terminus ante quem, can be determined from quotations in later works. Kṣīrasvāmin's commentary on the *Amarakoṣa*, which contains numerous quotations from it, testifies to its existence in the first half of the twelfth century. It may therefore have been composed in the period between A.D. 1000 and 1100,³⁴⁴ not earlier, because the *Aṣṭāṅganighaṇṭu*, which presents a less advanced stage of composition of a nighaṇṭu, can be assigned to the period 800–1000. The reference to the *Dhanvantarīyanighaṇṭu* as one of his sources by Maṅkha (first half of the twelfth century)³⁴⁵ in his *Anekārthakoṣa* and the quotations in Vardhamāna's *Gaṇaratnamahodadhi* (composed in 1140),³⁴⁶ Hemacandra's auto-commentary on his *Abhidhānacintāmaṇi* (twelfth century) and Aruṇadatta's commentary on the *Aṣṭāṅgaḥ-dayasaṃhitā* (earlier than 1200) confirm this dating. Some remarks in Kṣīrasvāmin's commentary³⁴⁷ seem to imply that he considered Amarasīṃha to have been acquainted with the *Dhanvantarīyanighaṇṭu* or an earlier version of it, but this is unacceptable and not supported by internal evidence.³⁴⁸

The descriptions of Cannabis, opium and zinc in the *Dhanvantarīyanighaṇṭu* do not invalidate the date suggested above, since these substances are also mentioned by Vaṅgasena (eleventh century).

Durgadeva

Durgadeva³⁴⁹ was the author of the *Riṣṭhasamuccaya* (= *Riṣṭasamuccaya*),³⁵⁰ a treatise in 261 Śaurasenī Prakrit verses on signs foreboding death (ariṣṭa or riṣṭa). This primarily jyotiṣa work is also of medical interest.³⁵¹

The riṣṭas are divided into three main groups: piṇḍattha (Sanskrit: piṇḍastha), payattha (Sanskrit: padastha) and rūvattha (Sanskrit: rūpastha) (17). Verses 18–40 discuss the piṇḍattha group, verses 41–67 the payattha group. The rūpastha group is subdivided into niyachāyā (Sanskrit: nijacchāyā; 69–84), parachāyā (Sanskrit: paracchāyā; 85–94) and chāyāpurisa (Sanskrit: chāyāpuruṣa; 95–106). The prognostic significance of dreams, divided into devadakahiya (Sanskrit: devatākathita) and saha ja, is also dealt with (107–129). Other groups of riṣṭa are: paccakkha (Sanskrit: pratyakṣa; 130–134), liṅga (135–147), paṇha (Sanskrit: praśna; 148–242).

The *Riṣṭhasamuccaya* was completed at the Śāntināthabhavana in Kumbhanagara in July 1032, during the reign of one Lakṣmīnivāsa. The work was written at the instance of Durgadeva's teacher, and is based on earlier works, e.g., the *Marāṇakaṇḍikā*.³⁵²

Durgadeva³⁵³ was a Digambara Jain, the pupil of Saṃjamadeva (Sanskrit: Saṃyamadeva), the pupil of Saṃjamasena (Sanskrit: Saṃyamasena), the pupil of Māhavana (Sanskrit: Mādhavacandra).³⁵⁴ He was a resident of Kumbhanagara.³⁵⁵

Ekāmranātha

Ekāmranātha was the author of the *Āyurvedasudhānidhi*,³⁵⁶ sometimes ascribed to Sāyaṇa,³⁵⁷ but actually written at the request of the latter,³⁵⁸ which means that it dates

from the fourteenth century. The work is referred to in Sāyaṇa's *Alaṅkārasudhā-nidhi*.³⁵⁹

Ekāmrānātha, of Kāśyapagotra, is described as the father of Kāmeśānātha and the maternal grandfather of Śrīśailānātha, who wrote the *Praśnottaramālā*.³⁶⁰

Gaṅgādhara

Gaṅgādhara was the author of the *Gandhasāra*,³⁶¹ a treatise on cosmetics and perfumery, compiled from various sources.³⁶² This work may be the only comprehensive treatise on the subject that has been preserved. The art of cosmetics and perfumery, called *gandhayukti* or *gandhaśāstra*,³⁶³ has connections with the medical science.³⁶⁴

Contents³⁶⁵

The work is arranged in three chapters (*prakaraṇa*), consisting of verses composed in various metres. Each chapter begins with a *maṅgala* addressed to Śiva. The *maṅgala* of chapter one also praises Gaṇeśa, Sarasvatī, and a tutelary deity called *Gandhayakṣa*.³⁶⁶

The contents suggest that the *Gandhasāra* was intended for use at royal courts.³⁶⁷

Chapter one (*paribhāṣāprakaraṇa*; ninety-one verses) deals with techniques and technical rules; subjects covered are: the six basic techniques (*ṣaṭkarman*) employed in *gandhaśāstra* (6); the description of these techniques (*bhāvana*, 1.7; *pācana*, 1.8–2.20; *bodha*, 2.21–22; *vedha*, 2.23–25; *dhūpana*, 2.26–29; *vāsana*, 2.30), accompanied by various rules about *vāsana* and mixtures of fragrant substances (2.31–7.81); substitutes for particular ingredients (7.82–8.85); remarks about the effect of perfumes on one's health, constitution, etc. (8.86–91).

Chapter two (*gandhodakādinānāgandhopayogiprakaraṇa*; 392 verses) is concerned with *gandhodaka* (perfumed water; 12+6 verses); *mukhavāsa* (perfumes used to scent the mouth and the breath; 24 verses); *pārijāta* (special types of *mukhavāsa*, e.g., scented areca nuts, called *pūgakaṇa*; fragrant oils; 20+32 verses); *udvartana* (unguents and oils used for massage; 25 verses);³⁶⁸ *snāna* (scented water for bathing; 24 verses); *jalavāsa* (scented drinking water; 3+11 verses), followed by verses on fragrant unguents and *paṭavāsa* (perfumed powders for scenting clothes; 17 verses); *mṛgarāja* (the preparation of artificial musk; 2+10 verses); *dhūpa* (incenses; 64 verses); *vartī* (incense sticks; 15 verses); *dīpavartī* (perfumed wicks for lamps; 12 verses); *uddhūlana* (scented powders; 7+8 verses); *niryāsa* (artificial resins; 7 verses); *syanda* (exudations; 11 verses); *kusumādīdruti* (the extraction of oils, etc., from flowers, such as *jātī*, *mallī*, *ketakī*; 22 verses); *gandhasaṅkramaṇa* (the transmission of perfumes; 2 verses); *kṛtrimadravyāṇi* (the preparation of artificial perfumes, some of which with smells similar to those of natural products: artificial camphor, *javādi*, saffron, musk, guru, aguru, *kuṣṭha*; combinations and their numbers; 63 verses); *dravyamelanaprakāra* (mixtures of aromatic substances; 5 verses).

Chapter three (*dravyanighaṇṭus tatparīkṣā ca*; 120 verses) consists of a *nighaṇṭu*, which gives, after four introductory verses, the names of aromatic substances with their synonyms.³⁶⁹ The substances dealt with are divided into a number of groups: leaves (*paṭtravarga*; 42.5–12); flowers (*puṣpavarga*; 42.12–44.28); fruits (*phalavarga*; 44.28–

45.40); woody substances and rinds (kāṣṭhavarga; 45.41–46.56); roots (mūlavarga; 46.57–47.73); resinous substances (niryāsavarga; 47.74–48.82); substances derived from animals (jīvavarga; 48.83–49.91). The second part of the chapter is concerned with descriptions of substances and checks on their genuineness. The treatise ends with three concluding verses.

The only source quoted is a work called *Yogaraṅgālaya*.³⁷⁰ The editor of the *Gaṇḍhasāra*, R.T. Vyas, remarks that one verse (19.10 on snāna) forms also part of Varāhamihira's *Brhatsaṃhitā* (76.5),³⁷¹ and that four verses on snāna (20.21–24) are related to verses found in the same treatise (76.2–4). A number of other passages of the *Gaṇḍhasāra* may have been influenced by Varāhamihira's chapter on gandhayukti,³⁷² or by the chapters on perfumes of the *Agni-* and *Viṣṇudharmottarapurāṇa*.³⁷³

Special features

Six basic techniques of gandhaśāstra are distinguished and described: bhāvana: soaking the triturated ingredients in scented water and purifying the mixture five or six times; pācana: heating of the purified materials; bodha: reviving the scent by means of particular substances (bodhakadravya); vedha: penetration, effected by means of specific substances (candraḥ) or bodhakadravyas; dhūpana: fumigation; vāsana: transmission of the scent of particular flowers.³⁷⁴ Several varieties of pācana or pāka are described: puṭapāka, gartapāka, veṇupāka, dolāpāka, kharparapāka, haṃsapāka, kālapāka, etc.³⁷⁵

The aromatic substances are, for the purpose of combining them, divided into three classes: mitra (friendly), udāsīna (neutral), and śatru (hostile); equal quantities can be taken when the substances are mitra, half the quantity of an udāsīna substance, and a quarter of a śatru substance (6.62 and 70). Five types of gandhajala are distinguished: kalkāmbu, svarasa, kvātha, āsava, and kusumadruti (9.10–10.6). The author sometimes gives his own opinion on a disputed subject, after quoting various opinions (11.8–9). Many fragrant compounds have fanciful names. Names of pārijāta's are: vidagdha-dayita (12.8), madhukarasamtoṣa (13.9), tripuraharadāsavallabha (13.12). Names of dhūpas are: madanapatākā (25.10), dakṣiṇapavana (25.11), candrāmōda (25.12), ugra-śaraśīta (25.13), nārāca (25.18), tribhuvanaśāra (27.33), kolāhala (27.41), citramrgākṣa (28.54), etc. Names of vartis are: vasantatilaka (30.73) and māṇavakā (30.75). Some of the dhūpas are not only fragrant, but have special effects, such as: causing confusion (janamohana; 28.49), protecting pregnant women and young children (29.58), preventing possession by bhūtas and dākinīs (29.59), curing all kinds of fevers (29.60), and protection against noxious or poisonous insects, and wild animals (29.61–63).

A characteristic feature of the *Gaṇḍhasāra* is the frequent use of names for vegetable and other substances that are not common in āyurvedic treatises. Notable too is a preference for short or abbreviated names, such as nāga and its synonyms for nāgakesara, madhu for madhuyasti. Unusual substances and those introduced at a later date are also rather frequent.³⁷⁶

Noteworthy names³⁷⁷ are: ajā (37.22),³⁷⁸ amara (31.5),³⁷⁹ āruṇī (46.54),³⁸⁰ astrā (3.23; 26.25),³⁸¹ bandhumūla (23.17),³⁸² barbara (7.71; 27.37; 48.77),³⁸³ barbaraka (15.25),³⁸⁴ bhramara (9.4 and 10; 18.4; 28.47; 32.1),³⁸⁵ bhūta (19.14; 21.6; 31.5),³⁸⁶

cala (3.23; 26.25 and 28; 40.56),³⁸⁷ caṇḍalavaṅga (30.73),³⁸⁸ carmapattrī (42.7),³⁸⁹ caula (17.16),³⁹⁰ chāga (5.51; 7.76),³⁹¹ dānava (9.1 and 5; 34.8),³⁹² danuja (9.4 and 8; 19.13),³⁹³ dhārāputrī (17.16),³⁹⁴ dhūnaka (30.76),³⁹⁵ dīna (47.68),³⁹⁶ diti ja (31.5),³⁹⁷ ekāṅgī (47.70),³⁹⁸ ghūnaka (31.12),³⁹⁹ gomayākhyavṛkṣa (37.25),⁴⁰⁰ guru (5.56; 16.4; 23.1; 37.21),⁴⁰¹ harita (9.3),⁴⁰² hātaka (16.26),⁴⁰³ jīṅgikā (23.17; 36.11),⁴⁰⁴ jūhī (44.28),⁴⁰⁵ kākatuṇḍa (7.50 and 74),⁴⁰⁶ kāntā (9.8; 19.15; 21.2; 25.18; 26.20; 28.47; 30.41; 31.1),⁴⁰⁷ kāntāla (36.14; 44.26),⁴⁰⁸ kapi (18.18),⁴⁰⁹ karkāṭa (5.50; 38.38; 40.52; 51.117),⁴¹⁰ kaṭhina (16.4; 19.13 and 14),⁴¹¹ kauntī (7.79; 8.84; 19.16),⁴¹² kavukā (22.6),⁴¹³ khadrā (8.85 and 86),⁴¹⁴ kīreṣṭa (11.11; 36.11),⁴¹⁵ kokāhva (45.50),⁴¹⁶ kolakarmī (48.86),⁴¹⁷ koraṅgī (11.15),⁴¹⁸ kośa (15.20),⁴¹⁹ kukūra (7.71),⁴²⁰ kuṇṭāla (15.25),⁴²¹ kuntī (16.28),⁴²² lakṣmī (38.37),⁴²³ lālā (38.39),⁴²⁴ lava (13.9 and 10; 21.1),⁴²⁵ lāva (12.6; 22.8; 23.1; 43.13),⁴²⁶ lavalī (4.34; 31.5),⁴²⁷ mada (3.25; 8.83; 9.12; 25.10; 33.8),⁴²⁸ mrgamada (31.7; 37.20 and 21),⁴²⁹ mṛganābhi (36.8),⁴³⁰ nābhi (12.24; 34.9; 40.60),⁴³¹ nārī (25.17),⁴³² naṭī (16.28),⁴³³ nṛpavaktrāhva (47.68),⁴³⁴ pamarā (38.36; 50.110),⁴³⁵ paraśucchinna (35.16 and 17),⁴³⁶ pati (3.22; 12.21),⁴³⁷ piśuna (34.9),⁴³⁸ pīvara (38.33),⁴³⁹ priyā (7.82),⁴⁴⁰ rāma (6.66),⁴⁴¹ raṇa (33.2; 40.52),⁴⁴² rātripuṣpī (43.21),⁴⁴³ ravi (23.1; 24.3; 26.19; 27.32; 33.1),⁴⁴⁴ sakhī (47.67),⁴⁴⁵ saktu (29.61),⁴⁴⁶ śālī ja (9.12; 24.9; 31.4; 34.8; 36.13; 37.22; 48.84),⁴⁴⁷ śekhara (6.66; 38.36),⁴⁴⁸ śītalikā (38.33),⁴⁴⁹ śṛgāla (16.5),⁴⁵⁰ śrīpuṣpa (34.9),⁴⁵¹ sugandhibarbarī (7.74),⁴⁵² śuka (3.24; 12.21; 13.13; 19.12 and 16; 22.11; 23.1; 24.3 and 9; 27.33),⁴⁵³ śukra (18.18),⁴⁵⁴ śukrāhvā (7.75),⁴⁵⁵ suvarcā (43.18),⁴⁵⁶ suvarṇatālī (6.66),⁴⁵⁷ svarṇatālīkā (42.5),⁴⁵⁸ tanaya (38.38),⁴⁵⁹ taṅkaṇa (35.15),⁴⁶⁰ tuhinī (23.16),⁴⁶¹ turāṅgavadanā (46.54),⁴⁶² turuṣka (22.6; 24.5; 25.7; 40.59),⁴⁶³ vānīra (31.1; 46.57),⁴⁶⁴ vanitā (26.21),⁴⁶⁵ varṇikā (43.18),⁴⁶⁶ veśākhyā (16.28),⁴⁶⁷ veśyā (17.16),⁴⁶⁸ viḥāṇī (30.74; 45.39),⁴⁶⁹ vṛndā (9.7 and 10; 33.7),⁴⁷⁰ yāminī (12.21),⁴⁷¹ yati (38.36),⁴⁷² yavana (26.24 and 29),⁴⁷³ yuvati (3.22).⁴⁷⁴

The author

The author mentions his name, Gaṅgādharma, at the end of the work; the same name is found in the colophons. No particulars about him are known.

Date

The *Gandhasāra* is earlier than the *Gandhavāda*, which quotes some verses from it. The terminus post quem can only be deduced from the terminology employed, the substances mentioned as ingredients, and the possible sources of the work. R.T. Vyas, the editor of the text, places it in the eleventh or twelfth century, his main argument being that the *Gandhavāda*, assigned by him to the period A.D. 1250–1300, quotes it. P.K. Gode claimed that both the *Gandhasāra* and the *Gandhavāda* have been written in the period A.D. 1300–1600.⁴⁷⁵ The resemblances between the contents of the *Gandhasāra* and Māhuka's *Haramekhalā*⁴⁷⁶ suggest that both works do not differ much in date. The *Gandhasāra*, however, gives the impression of being later than Māhuka's work. The data available so far suggest a date not far removed from the twelfth or thirteenth century.

Gopālādāsa Kāyastha

Gopālādāsa Kāyastha, son of Balabhadra, was the author of the *Vaidyavilāsa*.⁴⁷⁷

Gopālādāsa

Gopālādāsa was the author of the *Cikitsāmrta*,⁴⁷⁸ a huge work on āyurveda, a large fragment of which has been preserved.⁴⁷⁹ The names of many of its chapters are recorded at the beginning of the text. The chapter on śārīra is an extract from the *Viṣṇudharmottarapurāṇa*, and that on the names and properties of drugs, in which conflicting views found in the various koṣas are reconciled on the authority of reliable koṣas like the *Śabdārnava*, etc., is said to be taken from the author's own *Sudhābindu*.⁴⁸⁰ Many local names are recorded in the chapter on drugs.

In the introductory verses of his treatise, Gopālādāsa enumerates a long series of authors and works that were no longer accessible, and for that reason known to him by name only: *Amṛtaghaṭa*,⁴⁸¹ *Amṛtavallikā*,⁴⁸² *Ārogyamañjarī*, *Bhīṣaṇmuṣṭi*,⁴⁸³ *Bindusāra*, *Bhoja*, *Candraṭa*, *Cikitsākalikā*, *Putrotsavāloka*,⁴⁸⁴ *Ravigupta*, *Siddhasāra*, *Tattvakalikā*,⁴⁸⁵ *Tiṣaṭa*, *Vaidyapradīpa*,⁴⁸⁶ *Vaidyaprasāra*, *Vyagradīnaśubhaṃkara*, *Yogarātnakaraṇḍaka*,⁴⁸⁷ and *Yogaśata*. As authors studied by him he mentions *Vābhāṭa*, *Vaṅga* (probably *Vaṅgasena*), *Vṇḍa*, *Cakra* and *Caṅga*,⁴⁸⁸ while he also refers to a *Cakrakathā* together with its *Sārakalikā*.

The authorities and works quoted in the preserved part of the *Cikitsāmrta* are: *Amitaprabha*, *Aśvinikumārasaṃhitā*, *Āyurvedasāra*, *Bhānumatī*, *Bhaṭṭāra*, *Bhavyadatta*, *Bhela*, *Bhoja*,⁴⁸⁹ *Cakra*, *Candrikā*, *Cikitsākalikā*,⁴⁹⁰ *Devīpurāṇa*, *Dīpikā*, *Dr̥ḍhabala*, *Gadādhara*, *Gayadāsa*, *Govardhana*, *Guṇākara*, *Hārāvālī*,⁴⁹¹ *Hārīta*, *Jejjaḍa*, *Kauśika*, *Kusumāvalī*, *Mādhava*, *Madhukoṣa*, *Nāgārjuna*, *Nīścalakara*, *Parāśara*, *Patañjali*, *Pavanakuṇḍa*,⁴⁹² *Ratnaprabhā*, *Ravigupta*,⁴⁹³ *Śabdārnava*,⁴⁹⁴ *Śrīkaṇṭhadatta*, *Trivikramadeva*, *Vābhāṭa*, *Vābhāṭāṭikā*, *Vaidyapradīpa*,⁴⁹⁵ *Vakula*, *Vaṅgasena*, *Vāpyacandra*, *Vijayarakṣita*, *Viṣṇudharmottara*, *Vṇḍa*, *Vṇḍaṭikā* (by *Śrīkaṇṭhadatta*), and *Yogarātnākara*.

The authorities most commonly quoted are *Śrīkaṇṭha* (23 times) and *Nīścala* (21 times); Gopālādāsa usually agrees with *Nīścala* against *Śrīkaṇṭha* when, as often, their conflicting views are recorded.

An unspecified *Cikitsāmrta* is quoted in *Govindasena's Paribhāṣāpradīpa*.

The author

Gopālādāsa was, according to the introductory verses of the *Cikitsāmrta*, a son of Keśava. His wife, called *Samptoṣā*, bore him two sons, *Kṛṣṇadāsa*⁴⁹⁶ and *Gaṅgādāsa*, who may have revised their father's work after his death. Copies of the *Cikitsāmrta* were made public by Balabhadra and Bhava, who were probably pupils of Gopālādāsa. Some colophons of the treatise indicate that the author was an *antaraṅga* of *Vindheśvara*. Gopālādāsa probably belonged to Bengal, for he records local names of medicinal plants which are still current in Bengal and he quotes many authorities who

lived there. Some verses from the *Cikitsāmr̥ta* prove that the author was a devotee of Viṣṇu.

Date

Gopālādāsa's date depends on that of his son Gaṅgādāsa, author of the *Chandomañjarī* and other works.⁴⁹⁷ P.K. Gode fixed Gaṅgādāsa's date within the period A.D. 1300–1500.⁴⁹⁸ D.Ch. Bhattacharyya discovered additional evidence enabling him to narrow down these limits. The latter examined the MS of a commentary on the *Chandomañjarī* by Jagannātha Sena Kavirāja, son of Jaṭādhara Kavirāja, the names of whose descendants up to the eighth generation were recorded by Bharatamallika in his *Candrapabhā*. As Bharatamallika composed this work about 1675, Jagannātha Sena's date falls late in the fifteenth century and Gaṅgādāsa cannot have lived later than about A.D. 1425. Moreover, Gaṅgādāsa quotes a verse from a play by Kaviśekhara Jyotirīśvarācārya, called *Dhūrtasamāgama*,⁴⁹⁹ written during the reign of the Kaṇṇāṭa king Narasiṃha of Mithilā, who ruled in the second quarter of the fourteenth century, which fixes the terminus post quem at about 1350. Thus Gaṅgādāsa must have written his works between 1350 and 1425. This is corroborated by a quotation from one of his treatises in Puṇḍarīkāṅkṣa Vidyāsāgara's *Kalāpadīpikā*,⁵⁰⁰ a commentary on the *Bhaṭṭikāvya*, composed in the late fifteenth century.

Hammīrarāja

Hammīrarāja, son of Samantarāja, is the reputed author of the *Sadyogamuktāvalī*⁵⁰¹ or *Yogamuktāvalī*,⁵⁰² a therapeutic treatise in 179 verses, divided into several chapters (prakaraṇa).

This Hammīrarāja is said to be the Cauhān king of Mewār who ruled from 1301 to 1365, and who patronized Rāghava, the grandfather of the author of the *Śārṅgadhara-paddhati*.⁵⁰³

Haripāla

Haripāla was the author of (1) a *Vaidyakaśāstra* and (2) a *Yogasāra*.⁵⁰⁴ The *Vaidyakaśāstra* is a therapeutic treatise in 256 Prakrit verses (gāthā), completed in 1284/85.

Haripāla was a Jain, as appears from his paying homage to the Tirthankaras at the beginning of the *Vaidyakaśāstra*. At the end he refers to the *Yogasāra*, which is therefore earlier.

Hemacandra

Hemacandra, the renowned mediaeval lexicographer,⁵⁰⁵ was the author of the *Nighaṇṭuśeṣa*,⁵⁰⁶ written as an appendix to the vanaspatikāya section of the *tiryakkāṇḍa* of his *Abhidhānacintāmaṇi* (4.197–267).⁵⁰⁷

Contents⁵⁰⁸

This work, which gives only names of plants and their synonyms, is divided into six sections (kāṇḍa), which deal with trees (vrkṣa; 3–183), shrubs (gulma; 184–291), creepers (latā; 292–335), vegetables (śāka; 336–368), grasses (tṛṇa; 369–385), grains, pulse and related plants (dhānya; 386–401). This arrangement is new and not found in other *nighaṇṭus*, but it should be noted that Hemacandra was not strict in applying his own scheme. The section on shrubs includes a herb like apāmārga (204–205)⁵⁰⁹ and a climber like jyotiṣmatī (209);⁵¹⁰ the presence of rāsnā in this section (219) may mean that this word designated a shrub according to Hemacandra and not an orchid.⁵¹¹ The section on creepers describes a herb like kaṭukā (298–299)⁵¹² and also lotuses and water-lilies (327–334), while the section on vegetables has verses on plants not used as such (saptalā, 340cd–341ab; prasāraṇī, 341cd–342; bhṛṅgarāja, 346cd–347ab).⁵¹³

The number of synonyms given in the *Nighaṇṭuśeṣa* is considerable, many being new.⁵¹⁴ Not only names of plants were recorded in it, but also names of fruits and seeds, etc.⁵¹⁵ In some cases Hemacandra seems to have been misinformed.⁵¹⁶

Hemacandra's sources for the compilation of the *Nighaṇṭuśeṣa* are almost completely unknown, but he may have consulted the *Aṣṭāṅganighaṇṭu*.⁵¹⁷ The subsection on lotuses and water-lilies and the whole sixth section have been taken over almost verbatim from his own *Abhidhānacintāmaṇi* (4.226–248).

The *Nighaṇṭuśeṣa* is quoted as Haima in Bhānujī Dikṣita's *Rāmāśramī* on the *Amaraakoṣa*.⁵¹⁸

Special features

Noteworthy names of plants are: amilāta and amlāta as synonyms of saireyaka⁵¹⁹ (245–246ab); japā (149d); kākakaṅgu (396a);⁵²⁰ kalambī (359ab);⁵²¹ kāṇḍīra (= kuṭannaṭa; 382);⁵²² kārpāsī, vanyā (157cd); karuṇa (52cd);⁵²³ kimpāka (155ab);⁵²⁴ kolipattra (= joraṇa; 107b);⁵²⁵ kṛṣṇalodhra (117b); kumārī (244); musalī (264); nalī (= grāmanalikā; 375cd);⁵²⁶ pathikā (279cd–280ab);⁵²⁷ rudrākṣa (141d);⁵²⁸ śrīthastinī (355ab);⁵²⁹ sthalagaṇḍīra (354ab);⁵³⁰ tālī (182ab);⁵³¹ vapuṣā as an odourless variety of hapuṣā (270ab); vāriparṇī (335ab);⁵³² viṭkhadira (= arimeda; 66). Two types of amlavetasa are distinguished (59cd), an inferior (śaṅkhadrāvaka) and a superior one (bāladrāvaka); two types of bījaka are mentioned (101cd), a superior (śikhigrīva) and an inferior one (gomūtraka); a variety of vandā is mentioned that is called nandīmukha (159ab).⁵³³

The author and his date

Hemacandra was born in Gujārāt in 1087 or 1088. He took holy orders as a Jain monk in 1097/98, was ordained as a Sūri in 1109/10, and assumed the ecclesiastical name of Hemacandra. He spent the greater part of his life at Anahillapāṭaka, the ancient capital of Gujārāt, where he was patronized by the Caulukya kings Jayasimha (1093–1142)⁵³⁴ and Kumārapāla (1142–1173).⁵³⁵ His wide learning made him known as the Kalikā-lasarvajña. He died of sallekhanā in 1172/73.⁵³⁶ Hemacandra wrote the *Nighaṇṭuśeṣa* after his *Abhidhānacintāmaṇi*, *Anekārthasaṃgraha* and *Deśnāmamālā*.⁵³⁷

Śrīvallabhagaṇi's commentary

Śrīvallabhagaṇi was the author of a commentary (īkā) on the *Nighaṇṭuseṣa*.⁵³⁸ He was a pupil of Jñānavimalagaṇi⁵³⁹ of the Kharataragaccha, the author of the *Śābdabhedaprakāśatikā* on Maheśvara's *Śābdabhedaprakāśa*,⁵⁴⁰ and wrote his works at the end of the sixteenth and the beginning of the seventeenth century.⁵⁴¹ The MSS of the *Nighaṇṭuseṣa* that were at the disposal of Śrīvallabha were rather defective.⁵⁴²

The commentary gives for each synonym the etymology, along the lines of Hemacandra's grammar, quotes many passages from technical works, and mentions the *Rājasthānī* term for each plant.⁵⁴³ In some cases it adds useful information; it distinguishes, for example, between *aralu* and *ṭuṇṭuka*, regarded as one and the same by Hemacandra (85ab), and between *meṣaśṛṅgī* and *vṛścikālī* (191–192ab).

Authors quoted or referred to by Śrīvallabha are:⁵⁴⁴ Amara, Amarasiṃha, Bhāgu-ri,⁵⁴⁵ Bhoja, Cāmundaṇaṇḍita, Candra,⁵⁴⁶ cāndrāḥ,⁵⁴⁷ Candranandana, Devacandrasū-ri,⁵⁴⁸ Dhanvantari,⁵⁴⁹ Gauḍa, Indra, Indu, jaināḥ, Kandalīkāra,⁵⁵⁰ Kauśika, Kṣīrasvāmin, Madanapāla, Maheśvara, nairuktāḥ, prācyāḥ, Pūrṇatalagaṇa,⁵⁵¹ Śrīdhara, Vāca-spati, vaidyāḥ, Vopadeva, and Vyāḍi.

The following works are quoted or referred to by him:⁵⁵² *Abhidhānacintāmaṇi*, *Abhidhānaśeṣa*,⁵⁵³ *Āgama*, *Amarāśeṣa*,⁵⁵⁴ *Amaratīkā*, *Anekārthasaṃgraha*,⁵⁵⁵ *Deśī*, *Deśīnāmamālā*,⁵⁵⁶ *Kādambarī*, *Kavikalpadruma*, *Mālā*, *Mañkha*,⁵⁵⁷ *Mekhalā*, *Mīmāṃsābhāṣya*, *Nighaṇṭu*, *Śābdānuśāsaṇa*,⁵⁵⁸ *Śāsvata*,⁵⁵⁹ *Suśruta*, *Vaijayanti*,⁵⁶⁰ *Varṇanigha-ṇṭa*,⁵⁶¹ *Viśva(kośa)*, *Viśvalocana*,⁵⁶² and *Vopadevadhātupāṭha*.⁵⁶³

Kaiyadeva

Kaiyadeva⁵⁶⁴ was the author of (1) *Nāmaratnākara*,⁵⁶⁵ (2) *Pathyāpathyavibodhaka*,⁵⁶⁶ often referred to as *Kaiyadevanighaṇṭu*, and (3) *Prayogasāra*.⁵⁶⁷

The *Pathyāpathyavibodhaka*⁵⁶⁸ is a large lexicon, containing more than just the names and properties of medicinal substances.

*Contents*⁵⁶⁹

The work is arranged in eight chapters (*varga*) with respectively 1,640 (*oṣadhivarga*), 147 (*dhātuvarga*), 112 (*dhānyavarga*), 449 (*dravavarga*), 237 (*kṛtānnavarga*), 260 (*māṃsavarga*), 503 (*vihāravarga*), and 310 (*miśrakavarga*) verses, making a total of 3,658 verses.

The *oṣadhivarga* deals with medicinal substances, chiefly of vegetable origin, the *dhātuvarga* with inorganic and some organic substances, the *dhānyavarga* with grains, pulse, and some other products. The *dravavarga* is about liquids; its section on water mentions many names of rivers (51–71). The *kṛtānnavarga* discusses prepared foods, and the *māṃsavarga* the flesh of various animals. The *vihāravarga* contains elaborate rules for maintaining health. The *miśrakavarga* is concerned with diverse subjects: groups of substances (1–19), weights and measures (24–46), medicinal preparations and allied substances (47–177), technical terms (181–215ab), poisons (218cd–226), and names of disorders (246–310).

Little is known about Kaiyadeva's sources. Some verses are taken from the *Suśrutasaṃhitā*;⁵⁷⁰ Parāśara is quoted once.⁵⁷¹

The *Kaiyadevanighaṇṭu* is quoted in Kṛṣṇadatta's commentary on Trimalla's *Śaśatāśloki*, the commentary by Rāghavabhāṭṭa, called *Padārthhādarśa* and written in 1493, on Lakṣmaṇadeśika's *Śāradātilaka*,⁵⁷² Raghunātha's *Bhojanakutūhala*, the *Śāligrāmanighaṇṭubhūṣaṇa*, and also, profusely, in Śivadatta's auto-commentary on his *Śivakoṣa*.

A *Pathyāpathyanighaṇṭu*, quoted by Kāśīrāma in his commentary on the *Śārṅga-dharasaṃhitā*, may be the *Kaiyadevanighaṇṭu*.⁵⁷³ Kaiyadeva may also be quoted in the *Nirṇayasindhu*,⁵⁷⁴ Jñānavimalagaṇi's *Śābdabhedaprakāśatikā*,⁵⁷⁵ and the *Ma'din al-Ṣhiṭā* by Miyān Bhūwah.⁵⁷⁶

Special features

Interesting medicinal plants are:⁵⁷⁷ ābhā(babūlaka) (1.1088);⁵⁷⁸ airāvātī (= vallī-khadira; 1.828cd–829);⁵⁷⁹ alambuṣā (different from muṇḍī; 1.1604);⁵⁸⁰ amlamāriṣa (1.636);⁵⁸¹ amlāyana (1.1525–1526);⁵⁸² āmrāgandhā haridrā (1.1118);⁵⁸³ āri (1.828cd–829);⁵⁸⁴ balācatuṣṭaya (1.1051–1054); bāluka (1.555);⁵⁸⁵ bhaṅgā (3.94);⁵⁸⁶ bhaṅgikā (1.1636cd–1637);⁵⁸⁷ bhāskarakarpūra (1.1287);⁵⁸⁸ bhūmyupodakā (1.659cd–660ab);⁵⁸⁹ brāhmaṇayaṣṭikā (= bhārgī; 1.1134);⁵⁹⁰ brahmasomā (1.1101cd–1102ab);⁵⁹¹ cauranimbūka (1.328);⁵⁹² devasārṣa (1.976);⁵⁹³ dolaṭphala (= madhūka; 1.455); elāna 1.509);⁵⁹⁴ gajakarṇī (1.1631–1634);⁵⁹⁵ gandhapriyaṅgu (1.1353cd–1354ab);⁵⁹⁶ the five varieties of guggulu (1.1409cd–1412ab); gugguluśāka (1.1420cd–1421ab);⁵⁹⁷ hastyāluka (1.1626);⁵⁹⁸ himakarpūra (1.1284); tśāvāsa(karpūra) (1.1283–1284ab); tśvarī (= nāgadamanī; 1.778);⁵⁹⁹ jalamāriṣa (1.637);⁶⁰⁰ japā (1.1521cd–1522ab); jīvanta (1.624);⁶⁰¹ kairātaacandana (1.1259);⁶⁰² kākāṇḍolā (= kolaśimbī; 1.603);⁶⁰³ kaṇṭakaraṇja (1.972);⁶⁰⁴ kapitthapatrā (1.419cd);⁶⁰⁵ karambhā (1.801);⁶⁰⁶ karpūratulasī (1.1554);⁶⁰⁷ kāṣṭhālu (1.1626);⁶⁰⁸ kṛṣṇapiṇḍita (1.904);⁶⁰⁹ kucelikā (1.680);⁶¹⁰ kulatthikā (3.78);⁶¹¹ kuntalī (1.651);⁶¹² kuśiṇśapā (1.978);⁶¹³ kuthiṇjara (1.650);⁶¹⁴ laṭvāka (= vanyakusumbha, 1.639);⁶¹⁵ lavalī (1.510);⁶¹⁶ madhukarkaṭī (1.262);⁶¹⁷ mahābāṣpa (1.805);⁶¹⁸ mahāpiṇḍita (1.904);⁶¹⁹ māṇavaka (1.481);⁶²⁰ mārkāṇḍikā (1.1002);⁶²¹ mucakunda (1.1520cd);⁶²² nartaka (= nīvāra; 3.103);⁶²³ palāśikā (= suṣavī; 1.594);⁶²⁴ parṇakarpūra (1.1289);⁶²⁵ parṇapiṇḍita (1.905);⁶²⁶ parpaṭī (1.1428–1429ab);⁶²⁷ pītadru (1.962);⁶²⁸ pītakaravīra (1.1543);⁶²⁹ potāśraya karpūra (1.1285);⁶³⁰ pustaśimbī (1.610);⁶³¹ rājālābu (1.537);⁶³² rājanimbūka (1.328);⁶³³ raktālu (1.1626);⁶³⁴ rāmaṭha (= toyāpāmārga; 1.1037cd–1038);⁶³⁵ śaṅkhālu (1.1626);⁶³⁶ śarkarānimbūka (1.328);⁶³⁷ sarpākṣī (1.691cd–692);⁶³⁸ sindūrī (1.1524);⁶³⁹ śirīṣikā (1.980);⁶⁴⁰ snehapiṇḍita (1.904);⁶⁴¹ śvetapiṇḍālu (1.1623);⁶⁴² śvetapiṇḍita (1.903);⁶⁴³ ṭaṅka, anya (1.408);⁶⁴⁴ tuvaraka (1.502cd–503);⁶⁴⁵ urumāṇa (1.507);⁶⁴⁶ vajrakanda (1.1586);⁶⁴⁷ vallīśimba (3.64);⁶⁴⁸ varṇśakuṭajī (1.893);⁶⁴⁹ vāriparṇī (1.1467cd–1468ab);⁶⁵⁰ vyāghrāṭaka (1.617).⁶⁵¹ Opium is not mentioned by Kaiyadeva.

Noteworthy terms designating diseases and various disorders occurring in the miśrakavarga (8) are: annagranthi = varāṭa = udarāmaya (254); aruṇṣikā = arus = rutpiśī = lomataskarī (251); avākarna = kālamūka (306); bahūllāsa = hikkā (256); chāta = kṛśa (308); galaṅgaṇḍa = gaṇḍamālā (264); galāṇikura = rohiṇī (264); gaṇḍuka = vikalāṅga

(306); gudagraha = udāvarta (282); guḍaguḍāśabdaḥ saruk = āṭopa (284); hemaṇṇikā = śītalikā = masūrikā (263); hr̥llāsa and utkleśa are two different disorders (288); īrma = arus (266); jāṭharagranthi = pr̥sthagranthi = guḍa = gulma (264); śuṣkā kaṇḍū = kacchū = rakasā, and bahisravā kaṇḍū = vicarcikā (258cd-259ab); kharva = kharvara = nikharva = vāmana (306cd-307a); khoḍa = jarāvara = khañja (305); kukara = kuṇi (305); mahāspṛṣṭa = visphṛṣṭa (263); malāvarodha = vibandhaka (283); muṣkavṛddhi = kuraṇḍaka = vṛddhi (281); nāha = ādhmāna (283); niścāraka = niścayavana = bimbiṣī = pravāhikā (255); padavalīmīka = ślīpāda (261); pratiśyāya is a synonym of rājayakṣman (246); tvakpuṣpa = sidhma (262); udanyā = tṛṣ (251); vardhma = antravṛddhi (281); vātāvarodha = viṣṭambha (283); vigra = kṣudranāsika (307b); vikṣobhī = syandī = śī-tavepathu = udarda (285cd–286); yakṣmalālā = mṛṇikā = kaphatantu = syandinī (247); yauvanakaṇṭaka (285ab).⁶⁵²

The disease called somaroga, introduced by Vaṅgasena, is referred to in vihā-ravarga 268.

The author

The author states in his introductory verses that he was a son of the physician Sāraṅga⁶⁵³ and a grandson of Padmanābha of Bhāradvājagotra,⁶⁵⁴ who was well versed in various sciences. Kaiyadeva may have lived in Gujārāt.⁶⁵⁵

Date⁶⁵⁶

The terminus ad quem can be determined from Rāghavabhaṭṭa's quotations from the *Kaiyadevanighaṇṭu*, which prove that the work antedates the year 1493. The oldest dated MSS were copied in 1514⁶⁵⁷ and 1514/15.⁶⁵⁸ The lower limit can be deduced from various indications. The references to the diseases masūrikā, vardhma and somaroga establish that Kaiyadeva is later than Mādhava, Vṛnda, and Vaṅgasena. The description of the plant called pītakaravīra⁶⁵⁹ may indicate a rather late date, since it does not yet occur in the *Madanapāla*- and *Dhanvantarinighaṇṭu*, where only the white and red karavīra are mentioned,⁶⁶⁰ whereas it is recorded in the *Rājanighaṇṭu*.⁶⁶¹ If Kaiyadeva's father was indeed the Sāraṅga who wrote the *Virasiṃhāvaloka* for king Virasiṃha, the upper limit is some decades after the year 1383. The combined evidence indicates that the *Kaiyadevanighaṇṭu* was composed in the period 1400–1450.

Kālidāsa

Kālidāsa was the author of (1) *Vaidyamanoramā*, (2) *Dhārākālpā*, and (3) *Rasasārasaṅcāya*.⁶⁶²

(1) The *Vaidyamanoramā*⁶⁶³ is a concise compendium on therapeutics.

The work consists of about 660 verses and a number of prose passages,⁶⁶⁴ arranged in twenty chapters (paṭala). The verses are written in various metres and their language is simple, but often poetical, and full of similes drawn from mythology.⁶⁶⁵ The treatise is only concerned with therapy.⁶⁶⁶ It contains mostly short prescriptions; complicated formulae are rare.⁶⁶⁷

The pattern at the base of the arrangement of the diseases is not clear, but may have been influenced by Vāgbhaṭa; chapters one to twelve are devoted to kāyacikitsā and śalya, thirteen is about gynaecology, fourteen about paediatrics, fifteen is devoted to bhūtavidyā, sixteen to śālākya and śalya, seventeen to various disorders, eighteen to guhyaroga, nineteen to viṣa, and twenty to rasāyana and vājīkaraṇa.

The materia medica is mainly of the classical āyurvedic type, mercurial and metallic preparations being rare, but Kālidāsa added a large amount of religious and magical procedures to his therapeutic armamentarium.⁶⁶⁸ Some recipes which are designated as secret may be regarded as Tantric elements,⁶⁶⁹ as well as the mention of the Iḍā and Pirigalā (19.6).

Kālidāsa does not refer to his sources⁶⁷⁰ and he is not quoted by later authors.⁶⁷¹

Chapter two, dealing with raktapitta and asṛgdara, includes some verses on asthirsāva⁶⁷² and somaroga (11–13), diseases said to be characteristic of women and men respectively, which is surprising since somaroga is always described as occurring in women only. Chapter six is remarkable on account of its insistence on the importance of kapharaktātisāra (4.6–7 and 9)⁶⁷³ and kapharaktapravāhaṇa (10–12).⁶⁷⁴ Among the verses of the same chapter devoted to pravāhaṇa (10–15) there is one which mentions bimbisī (14).⁶⁷⁵ Chapter eight has a verse on the treatment of śayyāmūtra (14). Uncommon diseases from the remaining chapters are svedamasūrikā (11.24),⁶⁷⁶ aṣṭapadāḥ infesting the human body (11.66–67),⁶⁷⁷ āsyalūtā (16.79–80),⁶⁷⁸ karṇakarṇikā (17.6),⁶⁷⁹ and liṅgalūtā (18.2–3).⁶⁸⁰ Diseases left unmentioned are upadamaṣa, śūkadoṣa and the kṣudrarogas.

Uncommon names of plants forming part of Kālidāsa's materia medica are: akiṃṣanādhipa (16.121),⁶⁸¹ ākulī (7.15, 19, 22),⁶⁸² alarkāri (19.49),⁶⁸³ aranyatulasī (17.12),⁶⁸⁴ bhūmisarpa (18.22),⁶⁸⁵ brahmadandī (18.11),⁶⁸⁶ gandhalakṣmī (13.42),⁶⁸⁷ haritamañjarī (6.28 and 72; 19.40),⁶⁸⁸ jharasī (4.5),⁶⁸⁹ kabarī (16.67),⁶⁹⁰ kāraskara (6.3; 11.56; 12.27; 13.26),⁶⁹¹ karpūravallī (11.37),⁶⁹² kikkisa (7.22; 16.121),⁶⁹³ kṣudranātha (16.105),⁶⁹⁴ kṣudrapapphaṇa (7.7),⁶⁹⁵ kukkuṭaṇiṣpāva (16.118),⁶⁹⁶ nagnaḥit (7.17; 11.43),⁶⁹⁷ papphaṇa (8.5),⁶⁹⁸ phalālikā (19.55),⁶⁹⁹ pūlāsa (7.18 and 21; 11.33),⁷⁰⁰ rāhūcchiṣṭa (3.24),⁷⁰¹ raktalaśuna (6.28),⁷⁰² raktapuccha (19.55),⁷⁰³ sāgarā (7.21),⁷⁰⁴ śākinī (7.17; 16.110),⁷⁰⁵ sirṇhalī (3.8),⁷⁰⁶ sthalaśṛṅgāta (7.3),⁷⁰⁷ śvetaparnāsa (6.30),⁷⁰⁸ śvetapūlāsa (16.9 and 57),⁷⁰⁹ talapota (16.39),⁷¹⁰ triśūlī (16.60),⁷¹¹ vairī (7.17),⁷¹² vātāmūlī (11.34),⁷¹³ yakṣadrś (6.32; 8.5 and 16; 16.46), yakṣākṣī (6.31), yakṣalocana (6.6), yakṣanetra (6.15).⁷¹⁴ Opium (6.3: ahiphena) and mercury (11.21; 18.9, 20, 21, 25) are prescribed by Kālidāsa.⁷¹⁵

(2) The *Dhārākalpa*⁷¹⁶ describes in twenty-seven verses a therapeutic procedure called dhārā, in which a fatty liquid, dripping from a suspended vessel, is applied to the body of a patient.⁷¹⁷

The maṅgala (1) is addressed to Gaṇeśa. The work deals with the beneficial effects of dhārā (2), the types of wood for the construction of the droṇī, i.e., the wooden frame in which the patient lies down (3), the dimensions of this droṇī (4), the auspicious time for beginning the treatment and the ceremonies to be performed (5), the vessel, called karaka, used for anointing the head of the patient (6), the qualities of the attendants and

the substances to be used for the dhārā, i.e., sesamum oil, ghee, or a mixture of these (7–8), the four types of anointing the head of a patient preparatory to a dhārā with takra, i.e., diluted buttermilk (9), the takradhārā (10), vessels to be used for a dhārā (11), the treatment of a patient after the application of a dhārā (paścātkarman; 12), the effects of a takradhārā (13) and of a dhārā with sesamum oil and ghee (14), sneha and sveda (15–16), the duration of the treatment with dhārā and the prescribed height of the suspended vessel (17–18), faulty applications of a dhārā and the ways to remedy these (19–20), rules for the application of milk and dhānyāmla to the body of a patient (21), the right periods of time for the treatment and when it should not be performed (22), the after-treatment (paścātkarman; 23–24), behavioral rules for a patient during the treatment (25–26), and indications for treatment with dhārā (27).

One of the trees said to be suitable for the construction of a droṇī is called ḍolā.⁷¹⁸

(3) Information on the *Rasasārasaṃcaya* by Kālidāsa is not available.

The author

No particulars are known about Kālidāsa. He may be regarded as originating from Kerala on account of his mentioning a number of medicinal plants used in that region, and because he wrote the *Dhārākālpa*, which describes a therapeutic procedure that has always been in vogue there. He calls himself a devotee of Śiva (20.24).⁷¹⁹

Date

As Kālidāsa probably borrowed a formula from Sōḍhala, he is later than about 1200, and his reference to the disease called asthisrāva, also mentioned in the *Ārogyacintāmaṇi*, may indicate that he belongs to the same period as Dāmodara. A terminus ad quem cannot be determined, but his therapeutic procedures and materia may well confirm that he belonged to the fourteenth century.⁷²⁰

Kalyāṇadāsa

Kalyāṇadāsa was the author of the *Śabdaratnapradīpa* or *Ratnapradīpanighaṇṭu*.

This work is a homonymic lexicon, the catchwords being recorded in the alphabetical order of their first letters (from a to kṣa).

It was composed by Kalyāṇadāsa, son of Nāmadeva and grandson of Lakṣmīdhara, who resided at Bahādurapura during the reign of Yādava Tulasīdāsa, son of Gopāla and founder of that city, possibly towards the end of the thirteenth century. The work was written at the instance of the author's guru, Kāśīrāma, a Sārasvata brāhmaṇa of Bhāradvājagotra and a renowned physician in Mathurā, son of Mathurādāsa and grandson of Gurudāsa of Argalā.⁷²¹

Kānhaḍadeva

Kānhaḍadeva, son of Padmanābha, wrote the *Karmavipākasārasaṃgraha* or *Sāragrāhakakarmavipāka* in 1384. Karṇasiṃha, a minister of Durgasiṃha who was a son of

Bhūpāla, was the partner of the author.⁷²²

Kedārabhaṭṭa

See: *Vaidyaratna*.⁷²³

Keśava

Keśava was the author of the *Siddhamantra*,⁷²⁴ a nighaṇṭu in 169 verses of diverse metres, called thus since, like a siddhamantra, in spite of its very small size, it is very efficient in enabling one to know the power of drugs.⁷²⁵ Keśava's son, Vopadeva, wrote a commentary on it, called *Siddhamantraprakāśa*.⁷²⁶

*Contents and special features*⁷²⁷

The actions of a good number of drugs are described in a new way by Keśava, who concentrates on their effects on the doṣas, leaving aside their rasa, vīrya and vipāka, which can be inferred.⁷²⁸ Though the most common type of nighaṇṭu usually specifies the rasa, vīrya and vipāka of a medicinal substance first, the effect on the doṣas is mostly mentioned as well, together with a number of other properties. Bearing this in mind, the *Siddhamantra* is of a new type in exclusively taking notice of what is called the doṣaprabhāva and enlarging upon this subject, which makes it a very interesting work.

The first nine verses, called navaśloki in the commentary, are, apart from the two introductory stanzas, concerned with a short exposition on the general principles adopted in the book. In verse five the author declares that his book will resolve the problems arising from the mutually conflicting views of Caraka, Suśruta, and Khāraṇādi⁷²⁹ concerning the actions of drugs. It can be concluded from verses six to eight⁷³⁰ that fifty-seven types of drugs are distinguished in relation to their effects on the doṣas.⁷³¹ A special category among the actions of drugs, as a result of which the doṣas are neither alleviated nor provoked, but which may contribute to the one or the other outcome, depending on accompanying circumstances, is called udāśīna.⁷³²

Verse nine gives the subjects of the eight Vargas into which the treatise is divided: (1) vātaghnavaṛga, (2) pittaghnavaṛga, (3) kaphaghnavaṛga, (4) vātapittaghnavaṛga, (5) kaphavātaghnavaṛga, (6) kaphapittaghnavaṛga, (7) doṣaghnavaṛga, (8) doṣalavaṛga. These Vargas list drugs with an action contrary to one (1–3), two (4–6) or all three doṣas (7), whereas Varga eight enumerates drugs provoking these. The treatise ends with a concluding verse and one containing information on the author.⁷³³

Keśava and the *Siddhamantra* are quoted by Śivadatta in his auto-commentary on the *Śivakoṣa*.⁷³⁴

An *Āyurvedaprakāśa* by Paṇḍitakeśava, who may or may not be the author of the *Siddhamantra*, is quoted by Hemādri.⁷³⁵

The author

The last verse of the *Siddhamantra* reveals the author's name, Keśava, and that of his

father, Mahādeva, the name of his teacher in medicine, Bhāskara, and finally that of the king by whom he was honoured, Siṃharāja. Additional information is given in his son's commentary on this verse: Mahādeva was a brāhmaṇa, living in Mahārāṣṭra; Bhāskara was a brāhmaṇa as well, living in Vedapura,⁷³⁶ the capital of the country; Siṃharāja was the king of Daṇḍaka.⁷³⁷

Date

Since Keśava appears to have been the royal physician of Siṃharāja, who is usually identified with Siṃhaṇa or Singhaṇa II, one of the Yādava kings of Devagiri,⁷³⁸ who reigned from A.D. 1210 to A.D. 1247,⁷³⁹ he lived during the first half of the thirteenth century.⁷⁴⁰

Lakṣmaṇa Paṇḍita

Lakṣmaṇa Paṇḍita, a Jain, son of Vallabha,⁷⁴¹ was the author of the *Vaidyavallabha*.⁷⁴² He wrote this work at the request of Bukka II (1404–1406) of the Vijayanagar kingdom, to whom he was a personal physician (prāṇācārya).⁷⁴³

The *Lakṣmaṇotsava*

The *Lakṣmaṇotsava*⁷⁴⁴ is an encyclopaedic work on medicine⁷⁴⁵ of about 4,000 verses, arranged in sixty-four chapters,⁷⁴⁶ and completed in A.D. 1449/50.⁷⁴⁷

Chapters one to twelve describe: (1) the genealogy of the author's patron,⁷⁴⁸ (2) anatomy (śārīra), (3) dinacaryā, (4) ṛtucaryā, (5) weights and measures (paribhāṣā), (6) the purification of the dhātus (dhātusodhana), (7) times for administering medicines (bhaiṣajyakālādinirūpaṇa), (8) dreams (svapnalakṣaṇa), (9) the examination of the pulse (nāḍīparīkṣā), (10) karmavipāka, (11) a list of diseases (sarvarogagaṇanā), and (12) the aetiology of the diseases (sarvaroganidāna). Chapters thirteen to fifty-nine deal with the diseases and their treatment, generally in agreement with Mādhava's order, but with the omission of chapters on apasmāra, hṛdroga, mūtrāghāta, āsmarī, udara, vṛddhi, vidradhi, śārīravraṇa, sadyovraṇa, bhagna, nāḍīvraṇa, upadaṃśa, sūkadoṣa, amlapitta, and masūrīkā. The last five chapters are about vājīkaraṇa, rasāyana, pañcakarman, dīpanapācanādi (technical terms for particular actions of medicines), and miscellaneous subjects (miśrakavarga).⁷⁴⁹

Sources referred to in the introductory verses (1.39) are Atri, Bheḍa, Caraka, Nityanātha, Suśruta, and Vāgbhaṭa.

The *Lakṣmaṇotsava* is quoted in Ananta's *Pratāpakalpadruma*, Dattarāma's *Brhadrasarājasundara*,⁷⁵⁰ Cāmuṇḍa's *Jvaratimirabhāskara*, and in the *Yogaratnākara*.⁷⁵¹ It is referred to in Nidhi's *Yogasamuccaya*.

A *Vaidyasarvasva* is also ascribed to Lakṣmaṇa, son of Amarasiṃha.⁷⁵²

Verses nine to thirty-nine of chapter one give a detailed genealogy of the author's patron Lakṣmaṇa,⁷⁵³ a kāyastha of the Māthura class, residing in Mathurā, and a son of Amarasiṃha.⁷⁵⁴ The stanzas in praise of this Lakṣmaṇa mention that he had a tank (dīrghikā) and a rest-house (dharmaśālā) constructed in Navaग्रāma.⁷⁵⁵ Lakṣmaṇa's fa-

ther, Amarasiṃha, held some high position at the court of Mahamandakhāna,⁷⁵⁶ a Śāka king (śākeṣa, śākottama), who was still reigning at Śrīpatha⁷⁵⁷ when the *Lakṣmaṇotsava* was composed. With regard to the authorship of the work, it appears that a certain Vedaśarman, who derived his medical knowledge from an extensive work by Kṣemaśarman,⁷⁵⁸ dictated it to one Puruṣottama who perhaps revised it.⁷⁵⁹ Two more persons, courtiers of Lakṣmaṇa, may have contributed to its composition.⁷⁶⁰

Lohaṭa

Lohaṭa, son of Padma and pupil of Milhaṇa, who wrote the *Cikitsāmrta*, was the author of the *Cikitsārnavaśaṃhitā*.⁷⁶¹ Since Milhaṇa belongs to the first half of the thirteenth century, Lohaṭa is somewhat later.

The *Madanapālanighaṇṭu*

The *Madanapālanighaṇṭu*⁷⁶² is also called *Madanavinoda*,⁷⁶³ *Madanavinodanighaṇṭu*,⁷⁶⁴ *Madanapālavinoda*,⁷⁶⁵ *Madanapālavinodanighaṇṭu*,⁷⁶⁶ *Madananighaṇṭu*,⁷⁶⁷ and probably *Madanaratnanighaṇṭu*.⁷⁶⁸ The work is attributed to king Madanapāla who, according to tradition, wrote a number of treatises on various subjects.⁷⁶⁹ It is said to have been popular in the Northwestern provinces of India up to relatively recent times.^{770 771}

Contents⁷⁷²

This nighaṇṭu contains 1,466 verses,⁷⁷³ arranged in thirteen vargas.⁷⁷⁴ The medically relevant verses are mostly ślokaś, whereas the introductory and concluding stanzas, as well as the first and the last ones of the majority of the vargas, are for the greater part in a longer metre. The verse at the end of the vargas is similar in most of them, ascribes the authorship to king Madana, and gives the name of the varga. The introductory verses praise Viṣṇu, Gaṇeśa, Sīrya and Kāśīrāja, while the first verse of the remaining vargas extols Viṣṇu or Kṛṣṇa in beautiful language. The work ends with a genealogy of Madanapāla (13.92–98), followed by the standard verse concluding a varga, and, finally, a verse with the date of composition.

The text of the treatise enumerates the synonyms of medicinal substances together with their properties,⁷⁷⁵ while at the end various other subjects are dealt with, as is usual in a nighaṇṭu. The contents are as follows: (1) abhayādivarga, vegetable drugs, beginning with haritakī (abhayā); (2) śuṇṭhyādivarga, spices and condiments, including the types of salt, etc.; (3) sugandhidravavarga, fragrant substances; (4) suvarṇādivarga, metals, minerals, gems, etc.; (5) vaṭādivarga, trees; (6) phalādivarga, fruits; (7) śākavarga, vegetables; (8) pānīyādivarga, liquids; (9) ikṣukādirasavarṇa, products of the sugarcane and related substances, together with honey; (10) dhānyaguṇavarṇa, grains and pulse; (11) dhānyakṛtānnādināmavarga, prepared foods; (12) māṃsavarga, the flesh of various animals; (13) miśrakavarga, on dinacaryā, ṛtucaryā, and related subjects.

The *Madanapālanighaṇṭu* is quoted in the *Āyurvedābhdhisāra*, Bhāvamiśra's gloss-

es on the *Bhāvaprakāśa*, Jñārasarāmaśarman's *Anupānadarpaṇa*, Kāśīrāma's commentary on the *Śāringadharaśaṃhitā*, Chālārī Nṛsiṃha's *Smṛtyarthasāgara*,⁷⁷⁶ Kāśīrāma's commentary on the *Śāringadharaśaṃhitā*,⁷⁷⁷ Khare's commentary on the *Rasaratna-samuccaya*,⁷⁷⁸ the *Rājanighaṇṭu*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭurātākara*, Priyavrat Śarmā's auto-commentary on his *Dravyagūṇasūtra*, Śivadatta's auto-commentary on the *Śivakoṣa*,⁷⁷⁹ Śrīvallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*⁷⁸⁰ and *Nighaṇṭuśeṣa*, Trimalla's *Yogatarāṅgiṇī*, Vaidyārāja's *Sukhabodha*, and Vallabhabhaṭṭa's commentary on the *Jvaratṛisatī*. It was one of the sources of Raghunātha ji's *Nighaṇṭusaṃgraha*, of the chapters on materia medica of Ṭoḍa-*ra's* *Āyurvedasaukhya*, the nighaṇṭu section of Trimalla's *Bṛhadyogatarāṅgiṇī*, and the *Śataśloki* of Trimalla.⁷⁸¹

Special features

Noteworthy names of drugs found in the *Madanapālanighaṇṭu* are:⁷⁸² ahiphena (opium; 1.345), ākāśavallī (1.262),⁷⁸³ āllūka (6.66),⁷⁸⁴ amṛta(phala) (6.59–60),⁷⁸⁵ aṇṇīra (6.67),⁷⁸⁶ ārāmaśītālā (1.311),⁷⁸⁷ asthiśrṅkhalikā (7.83),⁷⁸⁸ balāmoṭā (1.315),⁷⁸⁹ bhaṅgā (1.333),⁷⁹⁰ cauḥāra (2.35),⁷⁹¹ chilihiṇṭha (1.346),⁷⁹² citrakandaka (7.79),⁷⁹³ dīṇḍisa (7.32),⁷⁹⁴ elāphala (6.65),⁷⁹⁵ gaṇḍadūrvā (1.336),⁷⁹⁶ ghanāgamabhavā(vallī) (7.58),⁷⁹⁷ jasada (4.12),⁷⁹⁸ jayapāla (1.114),⁷⁹⁹ kāliṅga (different from kuṭaja; 7.9),⁸⁰⁰ kāñcanī (1.334),⁸⁰¹ kañcukā (7.86),⁸⁰² kapitthapatṛī (6.92),⁸⁰³ karmaraṅga (6.85),⁸⁰⁴ keyūra (different from hrīvera; 7.95),⁸⁰⁵ kharbūja (6.53–54),⁸⁰⁶ khasatila (1.344),⁸⁰⁷ kiṅkiṇī (6.43),⁸⁰⁸ kolaśimbī (7.33),⁸⁰⁹ kubjakā (3.88),⁸¹⁰ kukkuradru (1.312),⁸¹¹ kumārī (1.331),⁸¹² kuṭīra (7.52–53),⁸¹³ laghudrākṣā (6.5),⁸¹⁴ madhukarkaṭikā (6.79),⁸¹⁵ māṃsarohiṇī (1.320),⁸¹⁶ parpaṭī (3.71),⁸¹⁷ phoga (7.42),⁸¹⁸ rājapaṭolikā (7.45),⁸¹⁹ śamīṣikā (5.66),⁸²⁰ sārāmla (6.83),⁸²¹ śilemānī (6.21),⁸²² sindūrī (3.106),⁸²³ sthūlakanda (7.88),⁸²⁴ śvetavārtāku (7.24),⁸²⁵ tirigicchi (5.63),⁸²⁶ tumbī, miṣṭā (7.10),⁸²⁷ tuṇṭuka (different from śyonāka; 7.57),⁸²⁸ vallakanda (7.59),⁸²⁹ vandhyākarkoṭakī (1.273–274),⁸³⁰ vāsantī (3.91),⁸³¹ vaṭapattṛī (1.26),⁸³² viṣatinduka (6.40–42),⁸³³ and vuṣa (3.98).⁸³⁴

Especially to be noted is the presence of bhaṅgā, khasatila, ahiphena, and jasada⁸³⁵ in this list. Moreover some drugs are mentioned which were also included in Vopadeva's *Hṛdayadīpaka*: asthisamhāraka (1.321), hijjala (5.19), babūla (5.33; = babbūla), karañjī (5.62; = karañjikā), and jalakanda (7.89).⁸³⁶

The author

The works attributed to Madanapāla were probably not written by this person of royal lineage himself, but under his patronage by authors who are only partially known. One of these was Viśveśvara Bhaṭṭa (1360–1390),⁸³⁷ who composed the *Madanapārijāta*, a treatise on dharmaśāstra, sometimes ascribed to Madanapāla,⁸³⁸ and the *Mahārṇava*.⁸³⁹ This Guṇākara Viśveśvara, son of Vācaspati (author of the *Ātaṅkadarpaṇa* on the *Mādhavanidāna*), may have composed the *Madanapālanighaṇṭu* or have assisted Madanapāla in writing it.⁸⁴⁰

The genealogy of Madanapāla can be reconstructed from verses at the end of the *Madanavinoda*.⁸⁴¹ Madanapāla was a younger brother of Sahajapāla; both were

sons of Sādhāraṇa,⁸⁴² son of Hariścandra, son of Bharahapāla,⁸⁴³ son of Ratnapāla. Madanapāla was the father of two sons, who are both credited with a medical treatise; a paediatric text, *Śiśurakṣāratna*,⁸⁴⁴ is ascribed to the elder, Prthvīmalla, and the *Mahārṇava*⁸⁴⁵ to the younger, called Māndhātār. The descent of Madanapāla is confirmed by the introductory verses of the *Śiśurakṣāratna* where, however, Sahajapāla has remained unmentioned.⁸⁴⁶ The genealogy can be supplemented by data from the *Rasaratnapradīpa* by Rāmarāja, son of Ratnapāla, a descendant of Madana. The introductory verses of this treatise state that Madana, son of Sādhāraṇa, son of Haricandra, had two elder brothers, Lakṣmaṇasiṃha, the eldest, and Sahajapāla.⁸⁴⁷

Madanapāla belonged to the family of Tāka or Tākā kings,⁸⁴⁸ who ruled in Kāṣṭhā⁸⁴⁹ on the Yamunā, to the north of Delhi.⁸⁵⁰ Madanapāla's viruda was kaṭāramalla.⁸⁵¹

Date

The last verse gives the date of composition of the work: Monday, 8 January 1375.⁸⁵²

Mādhavakavi

Mādhavakavi was the author of the *Mādhavadravyagaṇa*, also called *Bhāvasvabhā-vavāda*.^{853, 854}

Contents

This treatise, containing 866 verses,⁸⁵⁵ is mainly about the medicinal qualities of dietic substances. It does not list their synonyms, but a number of drugs are also dealt with in its first chapter. The sources of the work are enumerated in two verses found only at the end of one of the MSS.⁸⁵⁶ These sources are Bheda, Caraka, Haricandra, Hārīta, Parāśara, Suśruta, Vāgbhaṭa, and Vaideha.

Mādhava's *Dravyagaṇa* is divided into the considerable number of twenty-nine chapters (varga).⁸⁵⁷ It is closely related to Cakrapāṇi's *Dravyagaṇa* and shares a large number of verses with that treatise, at least a quarter according to my provisional estimate, though also many differences can be noted. Mādhava's text is larger than that by Cakrapāṇi with regard to the number of verses and the number of chapters. Cakrapāṇi's dhanyavarga was, for example, broken up by Mādhava into a śāli-, kudhānya- and śimbidhānyavarga, the māṃsavarga into a māṃsa- and matsyavarga, and the madyavarga into a madya-, kāñjika-, and mūtravarga. Mādhava's large first chapter on drugs (vividhausadhivarga) is absent from Cakra's text, as well as the śreṣṭha-⁸⁵⁸ and the rasavarga.

The arrangement of the drugs in the first chapter has been influenced by the *Suśrutasaṃhitā* and Vāgbhaṭa's *Aṣṭāṅgasamgraha* according to P.V. Sharma,⁸⁵⁹ who also suggested that Mādhava has borrowed from the *Soḍhalanighaṇṭu*.⁸⁶⁰

Mādhava's *Dravyagaṇa* became a well-known work, as appears from its being quoted in Āḍhamalla's *Dīpikā* on the *Śārngadharasaṃhitā*,⁸⁶¹ Hemādri's *Āyurvedarasāyana*,⁸⁶² Kṛṣṇadatta's commentary on Trimalla's *Śataśloki*,⁸⁶³ Lakṣmīrāma's commentary on the *Siddhabheṣajamaṇimālā*, Niścāla's *Ratnaprabhā*,⁸⁶⁴ Śivādā-

sasena's *Tattvacandrikā*⁸⁶⁵ and commentary on Cakrapāṇi's *Dravyaguṇa*,⁸⁶⁶ and Vopadeva's *Siddhamantraprakāśa*.⁸⁶⁷ P.V. Sharma⁸⁶⁸ claims that the *Mādhavadravyaguṇa* is copiously quoted by Śivadatta Miśra in his auto-commentary on the *Śivakoṣa*; this, however, is an error, for these quotations are from the *Paryāyaratnamālā*.⁸⁶⁹ Vandyaghaṭīya Sarvānanda quotes, without naming Mādhava as his source, a portion of a well-known verse from the *Mādhavadravyaguṇa* in his commentary on the *Amarakoṣa*.⁸⁷⁰ One of the verses of Mādhavakavi's work (śākhavarga 29) attained great popularity and has been quoted by many commentators.⁸⁷¹ The whole of Mādhava's text was incorporated in Ṭḍarānanda's *Āyurvedasaṅkhyā*.⁸⁷²

Special features

Noteworthy is the description of the following drugs: jayapāla (vividhaṣadhi 28), bhaṅgā (vividhaṣadhi 63),⁸⁷³ āphūka, i.e., opium (vividhaṣadhi 110),⁸⁷⁴ khasatila, i.e., poppy seeds (vividhaṣadhi 111), śatāluka (phala 10),⁸⁷⁵ madhukarkaṭikā (phala 30), a variety of date called śilemānī (phala 46),⁸⁷⁶ amṛtaphala (phala 62), hastikarkoṭaka (śāka 31),⁸⁷⁷ and piṇyākī (śāka 67).⁸⁷⁸

The author

Until comparatively recent times it was often supposed that one and the same author, called Mādhava, was responsible for the composition of the *Rogaviniścaya* and the *Dravyaguṇa*, while, moreover, *Dravyaguṇa* and *Bhāvasvabhāva* were regarded as different works.⁸⁷⁹ N.N. Das Gupta (1936–37: 155) on the other hand, regarded, long ago, the *Bhāvasvabhāva* as written by a Mādhava who was later than the author of the *Rogaviniścaya*. The edition of the text by P.V. Sharma has dissolved the confusion and uncertainty, making it clear that *Mādhavadravyaguṇa* and *Bhāvasvabhāva* are two titles of the same work by an author who calls himself Mādhavakavi. P.V. Sharma also tried to reconstruct the genealogy of the author of the *Mādhavadravyaguṇa*. He supposed that Th. Aufrecht⁸⁸⁰ had described Mādhava, author of the *Dravyaguṇa*, as the son of Cakradatta, grandson of Śrīkaṇṭhadatta, and father of Puruṣottama, but this is a wrong interpretation, since Aufrecht refers in this way to the genealogy of Puruṣottama, author of a *Dravyaguṇa*.⁸⁸¹ P.V. Sharma, proceeding on this wrong track, observed that Aufrecht's data are confirmed by a MS of Puruṣottama's *Dravyaguṇa*,⁸⁸² in which the author calls himself son of Mādhava, grandson of Cakradatta, and great-grandson of the Śrīkaṇṭhadatta who wrote commentaries on the saṃgraha's of Vṛnda and Mādhavakara. It is extremely unlikely that Puruṣottama's father was the author of the *Mādhavadravyaguṇa*, for Puruṣottama, who eulogizes Śrīkaṇṭhadatta, would not have remained silent about his father's well-known work. Moreover, the number of authors called Mādhava is exceedingly large. It must accordingly be concluded that no details concerning Mādhavakavi are known. His title kavi may, if interpreted as an abbreviation of Kaviṛāja, indicate that he belonged to Bengal.⁸⁸³

Date

One of the MSS utilized by P.V. Sharma for his edition of the *Mādhavadravyaguṇa* was copied in 1452.⁸⁸⁴ The quotations by Vopadeva and Hemādri indicate that the treatise

was known in the second half of the thirteenth century. Nīścalakara was also acquainted with Mādhava's *Dravyagūṇa*, which establishes that it was written before 1150–1200. If it is accepted that Vandyaghaṭīya Sarvānanda knew the work and quoted from it, the date of its composition is earlier than 1159/60.⁸⁸⁵ Due to its affinity with Cakrapāṇi's *Dravyagūṇa*, which may have been one of its main sources, it cannot be earlier than the third quarter of the eleventh century.

P.V. Sharma claims that Mādhavakavi's work dates from about 1250.⁸⁸⁶ He disregards the quotation by Vandyaghaṭīya Sarvānanda⁸⁸⁷ and bases his date on the following arguments. Firstly, many verses from Mādhava's work tally with verses from the *Soḍhalanighaṇṭu*. As admitted by P.V. Sharma himself, it is also possible that both authors derived their information from a common source or that Soḍhala borrowed from Mādhava.⁸⁸⁸ Secondly, he applies the genealogy of Puruṣottama, son of Mādhava and great-grandson of Śrīkaṇṭhadatta, to the establishment of the date of Mādhavakavi. Since he places Śrīkaṇṭhadatta in the early thirteenth century, he regards Mādhavakavi as belonging to a later part of the same century.⁸⁸⁹ As already discussed, this line of reasoning is unacceptable. Thirdly, P.V. Sharma adduces internal evidence to corroborate his chronology. This evidence, consisting of the description of jayapāla, bhaṅgā, āphūka and śilemānī (kharjūrīkā) in the *Bhāvasvabhāva*, cannot be regarded as decisive, because bhaṅgā is prescribed by Vaṅsena and āphūka is found in Soḍhala's *Gadanigraha*.⁸⁹⁰ Moreover, the external evidence is strongly in support of an earlier date.⁸⁹¹

Commentary

A commentary, called *Vaidyavallabhā*,⁸⁹² on the *Bhāvasvabhāva* was written by Meghadeva, son of Ravinābha.⁸⁹³ This commentator ascribes the work to Mādhavakara and states at the end of each varga that the explanations, proposed by Meghadeva, son of Ravinābha, were redacted by Indumatī, whom Cordier⁸⁹⁴ inclined to identify with Indu, the commentator on Vāgbhaṭa's works.

The authorities quoted by Meghadeva are: āgamikāḥ, *Candrikā* (= *Nyāyacandrikā*), Devarāja, Gadādhara, Gayacandra (= Gayadāsa), Gayin, Jejjāta, Kharanāda, *Kṛśasuśruta*, Nala, *Sārasvataniḥaṇṭu*, Vāpyacandra, Viṣṇugupta, and *Yogaratra*. Since Aruṇadatta⁸⁹⁵ was also among Meghadeva's sources, his date cannot be earlier than the second half of the twelfth century. The reference to the *Sārasvataniḥaṇṭu* may mean that he is much later.

Maheśvara

Maheśvara, the author of the *Viśvaprakāśa*, *Śabdabhedaprakāśa*, and a lost *Sāhasāṅkacarita*,⁸⁹⁶ is credited with a *Cikitsāmaṇava*.⁸⁹⁷

Maheśvara, who wrote his *Viśvaprakāśa* in 1111/12, records in its introduction that he is a son of Śrī Brahma or Brāhma and a grandson of the physician Kṛṣṇa. Among his ancestors are the physician Keśava, Vācaspati, the physician Dāmodara, the physician Śrīkṛṣṇa who was attached to the royal court at Gādhīpura, and Haricandra⁸⁹⁸ who was the court physician to Sāhasāṅka and the author of a commentary on the *Carakasam-*

hitā.⁸⁹⁹

A medical author called Maheśvara is quoted in Herambasena's *Gūḍhabodha-kasamgraha*, Kavikanṭhahāra's *Prayogaratnākara*, and (as Māheśvara) in Mādhava Kavirāja's *Mugdhabodha*.

Milhaṇa

Milhaṇa compiled his extensive *Cikitsāmrta* at Delhi in 1224, during the reign of Śams-ud-Dīn Iltutmish. He wrote it for his pupils Garigādhara, son of Deveśvara, and Lohaṭa,⁹⁰⁰ son of Padma, being encouraged by Madana (or Mādhava) of Agrota family, the guru of Arjunavarman, king of Mālwa. Milhaṇa was the son of Kuloddhāra of the Jāyasa family, a branch of the royal family of Śūrasena; it came from Tribhuvanagiri, founded by Tribhuvanapāla.⁹⁰¹

An unspecified *Cikitsāmrta* is quoted in the *Bhesajamañjūsāsanayya*, Govindasena's *Paribhāṣāpradīpa*, and Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*.⁹⁰²

Momahaṇa

Momahaṇa was the author of the *Momahaṇavilāsa*, a treatise of 8,000 verses,⁹⁰³ arranged in eleven chapters (adhikāra), on aphrodisiacs, gynaecology, and obstetrics.

The chapters deal with (1) śukravṛddhikarauśadhā; (2) śukrastambhakaūśadhā; (3) liṅgavṛddhidhārṇava; (4) liṅgastambhakarakaūśadhā; (5) saṇḍhatvanāśakaūśadhā; (6) vāndhyātvanāśakaūśadhā, garbhakarākṣārthaṃ mantrauśadhaprayogaḥ, bhagasam-kocavidhi, strīrogacikitsādi; (7) bālarogacikitsopayogyauśadhamantrādi; (8) bālagrahacikitsā; (9) and (10) dākīnicikitsādi; (11) bālagrahādinivāraṇārthaṃ katipayaman-trokti, māheśvarādidhūpanirmāṇavidhi.⁹⁰⁴

Momahaṇa was a son of Prayāgadāsa, a kṣatriya of Kālpi, and a grandson of Harivāghala.⁹⁰⁵

The *Momahaṇavilāsa* was composed in 1411/12, during the reign of Mahmūd Shāh, the son of Fīrūz Shāh Tughluq (1351–1388).⁹⁰⁶

The *Kakṣapuṭa* by Siddha Nāgārjuna

The *Kakṣapuṭa*,⁹⁰⁷ ascribed to Siddha Nāgārjuna, is a Tantric treatise on ṣaṭkarman.⁹⁰⁸

Contents⁹⁰⁹

The work consists of more than 500 verses and some prose,⁹¹⁰ arranged in twenty chapters (paṭāla). The subjects are listed in chapter one: vaśya,⁹¹¹ ākarṣaṇa, stambha, moha, uccāta, māraṇa, vidveṣa, vyādhikaraṇa,⁹¹² paśusasyārthanāśana,⁹¹³ kautuka, indrajāla, yakṣiṇīmantrasādhana, cetaka,⁹¹⁴ añjana, divya, adṛśya, pādukāgati, guṭikā,⁹¹⁵ khecaratva,⁹¹⁶ mṛtasamjīvana,⁹¹⁷ etc. (1.11cd–13).⁹¹⁸

The titles of the chapters are: (1) mantrasādhana (111 verses); (2) sarvavaśīkaraṇa⁹¹⁹ (47 verses); (3) rājavaśīkaraṇa⁹²⁰ (25 verses); (4) strīvaśyādīdrāvaṇa (73

verses); (5) *pativaśya*⁹²¹ (21 verses); (6) *ākaraṣaṇa*⁹²² (13 verses); (7) *gatistambhana*⁹²³ (65 verses); (8) *sainyastambhana*⁹²⁴ (21 verses); (9) *mohana* and *uccāṭana*⁹²⁵ (30 verses); (10) *māraṇa*⁹²⁶ (20 verses); (11) *vidveṣaṇa*⁹²⁷ (61 verses); (12) *kautuka*⁹²⁸ (21 verses); (13) *indrajālavidyāsādhana*⁹²⁹ (75 verses); (14) *yakṣiṇīsādhana*⁹³⁰ (33 verses); (15) *sarvāṇjanādinidhidaśana*⁹³¹ (48 verses); (16) *nidhivaśīkaraṇa*⁹³² (10 verses); (17) *adrśyakaraṇa*⁹³³ (42 verses); (18) *pādūkāsādhana*⁹³⁴ (15 verses); (19) *kālavañcana* (28 verses); (20) *sarvasaṃkhyāsādhana* (69 verses).⁹³⁵

Of some interest with regard to medicine are two parts of chapter eleven which deal with procedures bringing about disease in adversaries (among the disorders mentioned are *lūtā*, a type of ulcer, *galatkuṣṭha*, a form of leprosy, and *pādasamkoca*, a contracture of the feet), and one section of chapter nineteen which describes signs of impending death (*mṛtyulakṣaṇajñāna*).

The author informs us in the first chapter (6–9) that his treatise is an extract from earlier works:⁹³⁶ *Sāmbhava*,⁹³⁷ *Yāmala*, *Maula*, *Kauleya*, *Āmaratantra*,⁹³⁸ *Svacchandatantra*,⁹³⁹ *Kākula*,⁹⁴⁰ *Sauca*, *Rājatantra*,⁹⁴¹ *Amṛteśvaratantra*,⁹⁴² *Uddīśatantra*, *Vātulantra*,⁹⁴³ *Ucchiṣṭa*,⁹⁴⁴ *Siddhiśābaratantra*,⁹⁴⁵ *Kiṅkiṇī*,⁹⁴⁶ *Merutantra*,⁹⁴⁷ *Kākacandeśvarīmatatantra*,⁹⁴⁸ *Sākinītantra*,⁹⁴⁹ *Ākinītantra*,⁹⁵⁰ *Raudra*, *Anugrahanigraha*,⁹⁵¹ *Kautuka*, *Śalyatantra*,⁹⁵² *Kriyākālagunottara*, *Haramekhalakagrantha*, *Indrajāla*,⁹⁵³ *Rasārṇava*, *Ātharvana*,⁹⁵⁴ *Mahāveda*,⁹⁵⁵ *Cārvāka*, and *Gāruḍatantra*.⁹⁵⁶

The *Merutantra* is referred to again in the body of the work (1.16; 8.9). Authorities mentioned are Bhānūsuta (1.56, 57, 59) and Somadevaguru (1.55).

P. Cordier asserted that the *Kakṣapuṭa* quotes the *Rudrayāmala*.⁹⁵⁷

Mantras abound in the *Kakṣapuṭa*.⁹⁵⁸

The *Kakṣapuṭa* is quoted by Ṭoḍara,⁹⁵⁹ it is referred to in Śrīdāsapaṇḍita's commentary on the *Aṣṭāṅgahṛdayasaṃhitā*.⁹⁶⁰ The *Rasendramāṅgala* mentions the *Kakṣapuṭa* and may contain verses from it. Many later works contain extracts from the *Kakṣapuṭa*.⁹⁶¹

The *Kakṣapuṭa* is closely related to the Mantrakhaṇḍa of Nityanātha's *Rasaratnākara*.⁹⁶²

The author and his date

The date of Siddha Nāgārjuna, whose name does not occur in the body of the work,⁹⁶³ has been discussed elsewhere.⁹⁶⁴ Since the *Kākacandeśvarīmatatantra*, one of the sources of the *Kakṣapuṭa*, refers to (Siddha) Nāgārjuna as an ancient authority, this *Kakṣapuṭa* cannot possibly have been composed by the latter. The text is later than the twelfth century, the period to which the *Kākacandeśvarīmatatantra* is usually assigned and earlier than Ṭoḍara's *Āyurvedasaṃkhyā*, which quotes it.⁹⁶⁵

The Yogaratnamālā by Nāgārjuna

The *Yogaratnamālā*⁹⁶⁶ or *Āścaryaratnamālā*,⁹⁶⁷ ascribed to Nāgārjuna,⁹⁶⁸ is of some medical interest, though it is chiefly a Tantric text dealing with magic.

*Contents*⁹⁶⁹

The treatise consists of 140 polished verses⁹⁷⁰ in āryā metre⁹⁷¹ about a large number of subjects⁹⁷² belonging to what is called *ṣaṭkarman* in Tantrism. Most of the stanzas describe procedures enabling one to achieve extraordinary aims, but the healing of bodily disorders also forms an integral part of the work.

Some of the topics are: *vaśya* (subjugation; 3–6); *vidveśaṇa* (sowing dissension; 7–10); *uccāṭaṇa* (eradication; 11–14); *puruṣāntardhāna* (rendering oneself invisible; 25–30); *kautūhala* (the production of unusual phenomena; 31–38); *agnistambha* (the quenching of fire; 39–42); *śastrastambha* (making weapons harmless; 55–58); *akālagrahaṇa* (causing solar and lunar eclipses; 63–67); *mṛtasaṃjīvana* (making dead animals alive again; 135), etc. Subjects pertaining more or less to medicine are: *lomaśātana* (the removal of hair; 51–54); *viṣāpahāra* (counteracting poisons; 73–76); *viṣamajvarāpahāra* (counteracting irregular fever; 77–78); *vandhyāputrajanana* (making a barren woman give birth to a son; 85–86); *vandhyākaraṇa* (producing sterility in a woman; 89–92); *lirigavṛddhi* (increasing the size of the male organ; 93–96); *śukrastambha* (delaying ejaculation; 97–100); *yonīśūlakaraṇa* (causing pain in the female organs; 101); *kuṣṭhakaraṇa* (causing *kuṣṭha* to appear; 102);⁹⁷³ *garbhastambha* (preventing delivery in a pregnant woman; 106); *vṛścikaviṣāpahāra* (counteracting the effects of a scorpion-bite; 108–111); *bhagaṣaṃkocana* (healing wounds of the female organs; 121); *bhagodghāṭana* (making the vagina accessible or inaccessible to the male; 122); *bhagapravāha* (causing bleeding from the female organs; 123).

Some of the recipes bear names, e.g., *kalpalalanā* (26) and *reṇurāja* (121).

At the end of the work the author, who calls himself *Nāgārjuna*,⁹⁷⁴ declares that he composed it from what he heard from his guru and learnt from other *śāstras*. He adds that he tested all the recipes and found them effective.⁹⁷⁵

Special features

Noteworthy names of medicinal plants are: *āhaka* (62),⁹⁷⁶ *mātulānī* (69),⁹⁷⁷ *śaśārika* (23),⁹⁷⁸ *śaśija* (39),⁹⁷⁹ *stabdhā* (34),⁹⁸⁰ and *śūla* (96).⁹⁸¹

The author and his date

The name of the author's guru, *Bhāskara*, may be hidden in a pun in the first verse, where he is compared to the sun (*bhāskara*). P.V. Sharma, who accepts this interpretation,⁹⁸² regards him as identical with the *Bhāskara* who was the father and teacher of *Soḍhala*⁹⁸³ and also the teacher of *Keśava*, which makes the *Nāgārjuna* who wrote the work a contemporary of these two (twelfth to thirteenth centuries)⁹⁸⁴ and distinct from *Siddha Nāgārjuna*.⁹⁸⁵ Since *Guṇākara* wrote his commentary on the *Yogaratanmālā* in 1239/40, the work is earlier than that date.

Commentary

A commentary (*vivṛti*)⁹⁸⁶ on *Nāgārjuna's Yogaratnamālā* was written by *Guṇākara*,⁹⁸⁷ a *Śvetāmbara* monk, who made use of more elaborate works of predecessors, as indicated by himself.⁹⁸⁸ The commentary was composed in 1239/40.⁹⁸⁹ The only sources referred to are a *Kośa* (ad 12), a *Dra vyagyaṇa* (ad 44), and a *Paryāya* (ad 35).

Local names of medicinal plants found in it are: bariārā (ad 85; = balā), bhelā (ad 63; = bhallātakabīja), bodatharī (ad 111; = stabdha), bodī kahlārī (ad 34; = stabdhā = śrāvaṇikā = muṇḍī), gojibhī (ad 78; = nāginī = govatsā),⁹⁹⁰ iriguvā (ad 26; = iṅgudī),⁹⁹¹ jethīmadhu (ad 85; = madhuyaṣṭi), kakahī (ad 59; = hrībīja = bālakabīja),⁹⁹² kākahī (ad 85; = atibalā),⁹⁹³ karihārī (ad 12 and 23; = halinī = lāṅgalī),⁹⁹⁴ thoharī (ad 76 and 100; = vajrī = snuhī).⁹⁹⁵ Other words of local origin are: suramā and rasavatā (ad 23 and 29; = sroto'ñjana), aṇasālā, the word for bhūnāga (an earthworm) in Saurāṣṭra, and kecuvā, the word used for that animal in Kānyakubja. As most of these words are said to be current in Gujarāt, the commentator may have resided in that region for a long time.⁹⁹⁶

A Guṇākara is quoted by Gopālādāsa,⁹⁹⁷ Nāganātha,⁹⁹⁸ Nīścalakara,⁹⁹⁹ Vācaspati,¹⁰⁰⁰ and Vijayarakṣita.¹⁰⁰¹ The quotations by Nīścalakara and Vijayarakṣita cannot be traced in the commentary on the *Yogaratanmālā* and may derive from a commentary on the *Carakasamhitā*¹⁰⁰² by a Guṇākara who evidently was a different person, since he lived a long time before his namesake.¹⁰⁰³

The *Śīsurakṣāratna* by Pṛthvīmalla

The *Śīsurakṣāratna*,¹⁰⁰⁴ also called *Bālacikitsā*,¹⁰⁰⁵ is a work by Pṛthvīmalla, the elder brother of Māndhātara and son of Madanapāla.

Contents

The *Śīsurakṣāratna* is a treatise on kaumārābhṛtya in three chapters (prakāśa): (1) garbhīṇīgarbharakṣānirūpaṇa, on prenatal care, especially on rituals to be observed during each month of pregnancy; (2) bālakarakṣānirūpaṇa, chiefly on bālagrahas and the contrivances for averting their attacks; (3) vaidyakoktauṣadhādinirūpaṇa, on children's diseases and their treatment.

Sources, mentioned in the introduction, are the *Prayogasāra*¹⁰⁰⁶ and Suśruta. The *Bhaviṣyottara* is referred to at the beginning of chapter one. Chapter two indicates that the author borrowed from the *Kriyākālaguṇottara*, *Nārāyaṇīya* and *Prayogasāra*. Chapter three contains the *Śītalāṣṭaka* from the *Skandapurāṇa*.

Pṛthvīmalla and his work are quoted in the *Paraśurāmapratāpa*, a work belonging to the sixteenth century.¹⁰⁰⁷

Special features

The order of the diseases in chapter three is not in conformity with the *Mādhavanidāna*; moreover, antravṛddhi, kuraṇḍa and vradhma are regarded as three separate nosological entities.¹⁰⁰⁸

The author and his date

The genealogy of Pṛthvīmalla is recorded in the introductory verses.¹⁰⁰⁹

Pṛthvīmalla's father, Madanāpala, wrote his *Madanavinoda* in 1375, which implies that the *Śīsurakṣāratna* can be assigned to the beginning of the fifteenth century.¹⁰¹⁰

Puruṣottama

Puruṣottama, son of Mādhava, grandson of Cakradatta, great-grandson of Śrīka-
ṇṭhadatta, wrote a *Dravyaguṇa*.

Puruṣottama states that his great-grandfather was the author of the second part of the *Madhukośa* and of the *Vyākhyākusumāvalī*, which establishes that he lived about A.D. 1200.¹⁰¹¹

Raṇakakesarin

Raṇakakesarin was the author of a *Rugṇadīpikā* or *Yogadīpikā*.¹⁰¹²

The *Ratnakutūhala*

The anonymous *Ratnakutūhala* was composed in 1442.¹⁰¹³

Śārṅgadharma

The *Śārṅgadharasaṃhitā* by Śārṅgadharma¹⁰¹⁴ has an important place in Sanskrit medical literature of the mediaeval period and became a popular work, which can be inferred from its inclusion in the minor triad of authoritative works called *Laghutrayī*.¹⁰¹⁵ The changes in the theory and practice of Indian medicine since the days of the early *saṃhitās* are faithfully reflected in it, especially the increasing influence of alchemy, while moreover the examination of the pulse is described for the first time in this treatise.

Contents

The work consists of 2,421 verses arranged in three sections (*khaṇḍa*) and thirty-two chapters, though the author himself states¹⁰¹⁶ that it contains 2,600 verses in thirty-two chapters. The first section (*pūrvakhaṇḍa*) has 453 verses in seven chapters, the second (*madhyamakhaṇḍa*) 1,284^{1/2} verses in twelve, and the third (*uttarakhaṇḍa*) 683^{1/2} verses in thirteen chapters. Part of the colophons, especially those of Kāśīrāma's commentary, also use the terms *sūtrasthāna*,¹⁰¹⁷ *śāstrasthāna*¹⁰¹⁸ and *cikitsāsthāna*,¹⁰¹⁹ in agreement with the work being a *saṃhitā*.¹⁰²⁰ A short table of contents is found in the first chapter.¹⁰²¹

I. *Pūrvakhaṇḍa*. (1) The *paribhāṣā* chapter deals with some basic concepts (3–5), the contents of the work (7–13ab), weights and measures (14cd–44ab), basic rules regarding the preparation of medicines, the time of collection of fresh drugs and the parts of the plants to be used (44cd–62ab).¹⁰²² (2) The *bhaiṣajyākhyānaka* chapter describes the five times of the day at which medicines should be taken (1–12), the concepts of *rasa*, *guṇa*, *vīrya*, *vipāka* and *prabhāva* (13–24ab), the relations between the *doṣas* and the seasons (24cd–30ab), and various causes of disequilibrium of the *doṣas* (30cd–36ab). (3) The *nāḍīparīkṣādividhi* chapter is about the examination of the pulse (1–9ab) and on prognostic signs (9cd–26).¹⁰²³ (4) The *dīpanapācana* chapter contains definitions of a series of terms designating drug actions.¹⁰²⁴ (5) The *kalādikākhyāna* chap-

ter is about anatomy;¹⁰²⁵ it describes a series of bodily structures, beginning with the seven *kālās* (1–7ab), and proceeds with the seven receptacles (*āśaya*; 7cd–10), seven *dhātus* (11–12), *malas* (13–15), *upadhātus* (16–18), seven layers of the skin (19–22), *doṣas* (23–36ab), *snāyus* and related structures (36cd–38ab), *śīrās* (38cd–39ab), *peśīs* (39cd–40ab), *randhras* (40cd–42), *phupphusa* and other viscera (43–45ab), the male genitals and the heart (45cd–47ab), and some more general subjects like respiration (48cd–50ab), *āyus* (50cd–51), etc. The chapter ends with verses on the evolution of the universe (*sr̥ṣṭikrama*) according to *Sāṃkhya* views (55–73). (6) The *āhārādigati* chapter is concerned with physiology (1–14ab), rules for the administration of medicines to children and related matter (14cd–20), the constitutions (21–24ab), and finally the characteristics of *nidrā*, *mūrchā*, *bhrānti*, *tandrā*, *glāni*, *ālasya*, *jṛṃbhā*, *kṣuta* and *udgāra* (24cd–29ab). (7) The *rogagaṇanā* chapter enumerates the diseases recognized by *Sārṅgadharma* and their several types (1–204).

II. The *Madhyamakhaṇḍa* deals with the various pharmaceutical preparations and contains a great number of formulae. (1) The *svarasādikalpanā* chapter defines a *svarasa*, describes the way it should be prepared, and gives many examples (2–20). It proceeds in the same way with the variety of *svarasa* prepared by means of *puṭapāka* (21–43ab).¹⁰²⁶ (2) The first part of this *kvāthādikalpanā* chapter (1–149) is on *kvāthas*;¹⁰²⁷ it also enumerates the drugs belonging to two *gaṇas*, namely the *vīratarvādigāṇa* (102cd–104ab) and the *varuṇādigāṇa* (128–129). The second part deals with the preparations called *pramathiyā* (150–151), *yavāgū* (152–153), *yūṣa* (154–156), *pāna* (157–158), *uṣṇodaka* (159–160), *kṣīrapāka* (161–164ab), *anaprakriyā* (164cd–166ab), *vilepī* (166cd–167ab), *peyā* and *yūṣa* (167cd–169ab), and *maṇḍa* (169cd–175ab). (3) The *phāṇṭādikalpanā* chapter describes the preparations called *phāṇṭa* (1–8) and *mantha* (9–13ab). (4) The *himakalpanā* chapter is about *himas* (1–9ab). (5) The *kalkakalpanā* chapter is concerned with *kalkas* (1–29ab). (6) The *cūrṇakalpanā* chapter (1–65ab) deals mainly with *cūrṇas*,¹⁰²⁸ but has also verses on *anupāna* (4–5), on some groups of drugs (16cd–19ab: *jīvanīyagaṇa*; 19cd–20: *aṣṭakavarga*) and on *kṣāra* (24–25). (7) The *guṭikākalpanā* chapter describes *guṭikās*, *modakas* and *vaṭakas*, which are closely related types of preparation (1–105).¹⁰²⁹ (8) The *avalehakalpanā* chapter is about *avalehas* (1–89ab).¹⁰³⁰ (9) The *ghṛtatailakalpanā* chapter is concerned with *snehapāka* (1–19ab), various types of medicated ghees (19cd–92) and oils (93–210), and also has some verses on *madhuśukta* (178cd–180). (10) The *saṃdhānakalpanā* chapter is about preparations made by way of fermentation (*saṃdhāna*), i.e., the types called *āsava* and *ariṣṭa*¹⁰³¹ (2–3), *sidhu*, etc. (4), *surā*, etc. (5–6), *vāruṇī* (7ab), *śukta* (7cd–10), *tuṣāmbu*, *sauvīra*, *kāñjika* and *saṇḍākī* (11–12). A number of *āsavas* (13–38)¹⁰³² and *ariṣṭas* (39–92) are described. (11) The *dhātuśodhanamāraṇa* chapter describes the purification (*śodhana*) and killing (*māraṇa*) of metals and a number of other inorganic substances. After enumerating the seven metals (*dhātu*) distinguished by *Sārṅgadharma*, namely gold, silver, brass (*āra*), copper, lead (*nāga*), tin (*vaṅga*) and iron (*tikṣṇa*), and describing their purification (1–4), the killing of each of these metals is dealt with (5–53ab). This is followed by a section on the seven *upadhātus*, which are mineral substances consisting of (53cd–54ab) *mākṣika* (pyrites), *tutthaka* (sulphate of copper), *abhra* (mica), *nīlāñjana* (stibnite

or antimonite, Sb₂S₃), śilā (= manahśilā, i.e., realgar, As₂S₂), ālaka (= haritāla, i.e., orpiment, As₂S₃) and rasaka (calamine, i.e., an ore of zinc). Procedures leading to the purification and killing of these substances are described (54cd–76ab), followed by the procedure aiming at the release of the essence of the metals (and upadhātus), the so-called sattvanirgama (76cd–78). The third part of this chapter is concerned with the purification and killing of some (semi)precious stones (79–92ab). It ends with the purification of bitumen (śilājatu; 92cd–99ab), the preparation of rust of iron (maṇḍūra; 99cd–101ab) and finally caustics (kṣāra; 101cd–104). (12) The rasakalpanā chapter mainly deals with mercurial preparations. It opens with a verse in praise of mercury (1), mentions its synonyms (2) and enumerates nine metals (3–4ab), i.e., the seven metals mentioned in chapter eleven, together with bell-metal (kāṁsyaka) and magnetic oxide of iron (kāntaloha). This is followed by the purification of mercury (4cd–13ab), sulphur (gandhaka; 13cd–15ab) and cinnabar (darada; 15cd–16ab), and the extraction of mercury from the last substance of these three (16cd–17). The nine poisons and seven secondary poisons are enumerated (18–20ab), and the so-called mukhakaraṇa of mercury is dealt with, which consists of procedures rendering it capable of ‘eating’ other substances (20cd–24); after this mukhakaraṇa it is called chinnaṇḍa, which means that it is now regarded as a bird whose wings have been clipped. The chapter goes on with the description of gandhakajāraṇa, i.e., the digestion of sulphur by mercury (25–29ab) and various procedures for the killing of mercury (29cd–41). The remaining part of the chapter consists of recipes for a number of rasaśuśadhas against various diseases (42–289).¹⁰³³ It ends with some verses on the purification of jaipāla (290) and poisons (291–294), which may be later additions because the commentators are silent on them.

III. The Uttarakhaṇḍa is about pañcakarman (chapters 1–8)¹⁰³⁴ and allied subjects (chapters 9–13). Its thirteen chapters deal with: (1) sneha (1–34ab); (2) sveda (1–35), said to be of four types: tāpa-, ūṣma-, upanāha-, and dravasveda; (3) vamaṇa (1–33); (4) virecana (1–48ab);¹⁰³⁵ (5) basti, especially the type called anuvāsana (1–51); (6) nirūha (1–34); (7) uttarabasti (1–16ab); (8) nasya and śirovirecana (1–63); (9) dhūmapāna (1–25); (10) gaṇḍūṣa and kavala (1–21ab); (11) lepa and some other subjects; this is a long chapter of 152 verses containing many prescriptions, among which are recipes for increasing the size of the penis (lingavṛddhi), tightening the vagina (yonisaṁkoca); śirobasti and karnaṇpūraṇa are also dealt with in this chapter; (12) śoṇitasrāva, i.e., bloodletting (1–45); (13) netrakarman, i.e., the application of medicinal preparations to the eyes; this long chapter of 128 verses is concerned with seven main types of preparation applied to the eyes: seka (2–12ab), āścyotana (12cd–21ab), piṇḍī (21cd–30ab), biḍāla (30cd–37), tarpaṇa (38–52ab), puṭapāka (52cd–61), and añjana (62–74); it also contains recipes for vartis (75–87ab), and ends with those for rasakriyās and some añjanas (87cd–124).¹⁰³⁶

Authors and works quoting from or referring to Śārngadhara or his saṁhitā are: Aghoranātha’s commentary on his *Bhīṣaksarvasva*, the *Amṛtasāgara* and Jñārasāma’s version of this work, the *Ārogyāmṛtabindu*, Āśubodha Senagupta’s commentary on Govindasena’s *Paribhāṣāpradīpa*, Āśubodha and Nityabodha Senagupta’s com-

mentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, Basava's *Śivatattvaratnākara*, Bhāvamīśra, the *Bheṣajasaṃhitā*, Bhoja's *Yuktikalpataru*, the *Br̥hannighaṇṭuratanākara*, Devasiṃha Viṭṭhal's *Br̥hadāsavāriṣṭasaṃgraha*, the *Dhātumāraṇa*,¹⁰³⁷ Dharmadatta's *Tridoṣasaṃgraha*, Gaṇanāthasena's commentary on his *Siddhāntanidāna*, Gaṇeśadaivajña's commentary on the *Muhūrtatattva*,¹⁰³⁸ Govindasena's *Paribhāṣāpradīpa*, Gulrājśarmamīśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpakvarasānimānavijñāna*, Mādhava's *Āyurvedaprakāśa*, Mahimasamudra's *Vaidyakacintāmaṇi*, Meghamuni's *Meghavinoda*,¹⁰³⁹ Nidhi's *Yogasamuccaya*, the *Pākamārtanḍa*,¹⁰⁴⁰ the *Pāradasaṃhitā*, the *Paraśūrāmapratāpa*,¹⁰⁴¹ Rājeśvaradatta Miśra's *Svasthanvṛttasamuccaya*, Rāma's *Śaṃkarākhyā*, Rāmacandra's *Rāmaavinoda*, the *Rasatattvavivecana*, the *Rasāyana-saṃgraha*,¹⁰⁴² the *Rasoddhāratāntra*, Hanumatprasāda Śarma's commentary on the *Siddhabhaiṣajyamañjūṣā*, Priyavrat Śarma's auto-commentary on the *Āyurvedadarśana*, Śivamīśra's *Vaidyaśāstraśivānubhava*, Somadevaśarma's commentary on the *Āyurvedaprakāśa*, Ṭodara's *Āyurvedasaukhyā*,¹⁰⁴³ Trimalla's *Yogatarāṅgiṇī*,¹⁰⁴⁴ and *Br̥hadayogatarāṅgiṇī*,¹⁰⁴⁵ the *Uttanakadarpaṇa*,¹⁰⁴⁶ an anonymous *Vaidyaka-saṃgraha*, Vaidyarāja's *Sukhabodha*, the *Vāsudevānubhava*,¹⁰⁴⁷ Vidyāpati's *Vaidyarahasya*, Viśvanātha Dvivedī's *Rasendrasambhava*, Yādavji Trikamji's *Rasāmṛta* and *Siddhayaogasāṃgraha*, the *Yogaratanākara*,¹⁰⁴⁸ and Yogendranātha's *Āyurvijñānatnākara*. The *Śārṅgadharasaṃhitā* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamañimālā* and of the *Ma'din al-Šhiṭā*.

Large stretches of the *Śārṅgadharasaṃhitā* were incorporated in Bhāvamīśra's *Bhāvaprakāśa*.¹⁰⁴⁹ Vedakavi made use of it in the composition of his *Jīvānanda*. Many verses from *Śārṅgadharasaṃhitā* I.5 and 7 form part of the *Nāḍīcakra*. The unknown author of the interpolated portions of Niścalakara's *Ratnaprabhā* reproduces parts of the *Śārṅgadharasaṃhitā* and Āḍhamalla's commentary.¹⁰⁵⁰

Śārṅgadharā was also known to Rāma, who quotes him in his *Tilakā* on the *Rāmāyaṇa*.¹⁰⁵¹

Rāmacandra's *Vaidyavinoda*, written in Hindī verse in 1669/70, is an adaptation of the *Śārṅgadharasaṃhitā*.¹⁰⁵²

Special features ¹⁰⁵³

The series of the seasons consists of gr̥ṣma, prāvṛṣ, varṣāḥ, śarad, hemanta, vasanta; they are associated with the signs of the zodiac (rāśi): gr̥ṣma with Meṣa (Aries) and Vṛṣa (Taurus), prāvṛṣ with Mithuna (Gemini) and Karka (Cancer), varṣāḥ with Siṃha (Leo) and Kanyā (Virgo), śarad with Tulā (Libra) and Vṛścika (Scorpio), hemanta with Dhanu (Sagittarius) and Grāha (Capricornus), vasanta with Kumbha (Aquarius) and Mīna (Pisces) (2.25cd–26). Medicinal substances are said to possess only five main qualities (guṇa), namely guru, snigdha, tīkṣṇa, rūkṣa and laghu, corresponding with the five mahābhūtas; all the other qualities are included in these five (I.2.16–17ab).¹⁰⁵⁴ Two types of vīrya are distinguished, uṣṇa and śīta; the other types are included in these two (I.2.17cd–18).¹⁰⁵⁵

The *Śārṅgadharasaṃhitā* is the earliest Sanskrit medical text that summarily de-

scribes feeling the pulse for diagnostic and prognostic purposes (I.3.1–9ab).¹⁰⁵⁶ The types of pulse found in disturbances of the *doṣas* are characterized by comparing them with the way of moving of certain animals. Some signs of prognostic significance are enumerated and the types of pulse occurring in a number of diseased conditions, as contrasted with those in health, are also described.¹⁰⁵⁷

Pulse-examination had no place in Indian medicine in early periods, as is evident from the texts and attested by an important witness like I-ching,¹⁰⁵⁸ but is rarely omitted from medical treatises which are later than Śārṅgadharma.¹⁰⁵⁹ Investigations on the origin of the āyurvedic pulse-lore are wanting, though it has been suggested¹⁰⁶⁰ that it derives from Muslim medicine. Influences from Southern India should, however, not be neglected, because Siddha medicine has a highly developed and almost purely Tamil terminology for a large number of pulses.¹⁰⁶¹

Inauspicious and auspicious dreams are also dealt with in chapter three (I.3.14cd–26).

The actions of drugs defined in chapter four, and illustrated with examples, are: *dīpana*, *pācana*, *śamana*, *anulomana*, *sraṁsana*, *bhedana*, *recana*, *vamana*, *śodhana*, *chedana*, *lekhana*, *grāhin*, *stambhana*, *rasāyana*, *vājīkaraṇa*, *śukrala*, *śukrapravartaka* and *-janaka*, *sūkṣma*, *vyavāyin*, *vikāśin*, *madakārin*, *prāṇahara*, *pramāthin*, and *abhiśyandin*.

The chapter on anatomy (I.5) presents a number of noteworthy features. The organ, usually designated as *kloman* and regarded as the seat of thirst, is called *tila*¹⁰⁶² by Śārṅgadharma (I.5.8 and 45) and said to be located on the left side of the abdomen, above the seat of the digestive fire, though it is described as being present on the right side under the liver in earlier texts.¹⁰⁶³ Among the seven receptacles (*āśaya*) the chest (*uras*) is designated as the receptacle of living blood (*jīvarakta*; I.5.9), which is new. *Vāta* is said to be predominantly associated with *rajas* (I.5.26), *pitta* with *sattva* (I.5.29), *kapha* with *tamas* (I.5.33cd–34ab). The transformation of *rasa* into blood is said to take place in the liver (I.5.31); elsewhere (I.6.9), Śārṅgadharma asserts that this process occurs in the heart.¹⁰⁶⁴ A tenth orifice (*randhra*) of the body has been added to the traditional number of nine; it was interpreted as the hidden *brahmarandhra* on the top of the head by Āḍhamalla (ad I.5.41). The process of respiration has been described for the first time by Śārṅgadharma: “The *prāṇavāyu*, located in the umbilical region, touches the interior of the heart-lotus and then leaves (the body) by way of the throat, in order to drink the *amṛta* of Viṣṇu’s place (i.e., the atmosphere). After drinking the nectar (*pī-yūṣa*) of the atmosphere, it returns quickly, satisfying the whole body and nourishing the abdominal fire” (I.5.48cd–50ab).¹⁰⁶⁵

The verses on *Sāṁkhya* mention the five *tanmātras* (I.5.61cd–65ab).

Blood is described as present in the whole body and as the main support of life (I.6.10cd). Its qualities are *snigdha*, *guru*, *cala* and *svādu*; when *vidagdha*, it is like *pitta* (I.6.11ab).¹⁰⁶⁶

Śārṅgadharma’s nosography (I.7) differs from the systems found in the *Mādhava-nidāna* and *Vāgbhaṭa*’s works. As shown by the following survey, it has many features of its own, although the influences of *Vāgbhaṭa* and *Mādhava* are clearly perceptible.

Śārṅgadharma enumerates twenty-five varieties of fever, whereas *Mādhava* distin-

guishes eight of them. This number of twenty-five is obtained by counting separately the five irregular fevers (*viṣamajvara*), which Mādhava considers to be included in *saṃnipātajvara*, and by subdividing Mādhava's *āgantujvara* into thirteen varieties. The latter group consists of (a) fevers caused by *abhicāra*, *grahāveśa* and *śāpa*, (b) four traumatic (*ghāataja*) fevers, brought about by *śrama*, *cheda*, *kṣata*, and *dāha*, (c) six *abhiṣaṅga* fevers, arising from *kāma*, *bhīti*, *śuc*, *roṣa*, *viṣa*, and *ausadhagandha*. The majority of these varieties are also found in the *Mādhavanidāna*, but the four members of the *ghāataja* group are absent there. A closely related classification of the *āgantujvara*s occurs, however, in Vāgbhaṭa's works, which were obviously Śārṅgadhara's source of inspiration. The fevers called *caturthakaviparyaya*, *vātabalāsaka* and *pralepaka*, described by Mādhava, are not mentioned. Seven types of diarrhoea (*atisāra*) are listed, instead of the six of Mādhava; a variety caused by fear (*bhaya*), also recognized as a separate entity in the *Carakasamhitā* and in Vāgbhaṭa's works, has been added. A fifth type of *grahaṇī*, brought about by *āma*, is added to the four *doṣaja* types of Mādhava; according to the commentator Aḍhamalla, it is caused by *āmavāta*, while Kāśīrāma mentions *āma*. This suggests that it may be identical with *saṃgrahagrahaṇī*, described in some supplementary verses of the *Mādhavanidāna*.¹⁰⁶⁷ *Ajīrṇa* is divided into four varieties, whereas Mādhava mentions that some authorities recognize six types; Śārṅgadhara's fourth type, called *viṣājīrṇa*, unknown under that name in earlier treatises, may be closely related to the *rasaśeṣa* form of *ajīrṇa*, recognized by Mādhava in agreement with the *Suśrutasaṃhitā*. Three *doṣaja* types of *alasa* are said to exist, which are unknown in the classical *saṃhitās* and the *Mādhavanidāna*, where this disorder is regarded as one single entity. *Daṇḍakālasaka* is said to be related to *vilambikā*, although being a separate entity; this disorder, mentioned in the classical *saṃhitās*, is not described in the *Mādhavanidāna*.¹⁰⁶⁸ The classification of haemorrhoids (*arśāṃsi*) differs slightly from that of *Suśruta* and Mādhava, but agrees with that of Vāgbhaṭa. The group of twenty kinds of parasites (*kṛmi*)¹⁰⁶⁹ is expanded by the addition of *snāyuka* (*dracontiasis*), described for the first time in Vṛnda's *Siddhayoga*, and by the description of worms living in ulcers. *Kṣaya* (i.e., *rājayakṣman*) is divided into five types, according to whether it is caused by one of the three *doṣas*, by all three together, or by *uraḥkṣata*; the last type of this series is absent from Vāgbhaṭa's works; *uraḥkṣata* is a separate disorder in the *Mādhavanidāna*; it is not described as such by Śārṅgadhara. Six causes of *śoṣa* are listed instead of the seven of the *Suśrutasaṃhitā* and the *Mādhavanidāna*; *śoṣa* brought about by *uraḥkṣata* is absent. The group of disorders of the digestive fire (*agnivikāra*) has been increased by the addition of *bhasmaka*, not yet mentioned in the *Bṛhatrayī* and the *Mādhavanidāna*.¹⁰⁷⁰ Seven types of vomiting (*chardi*) are mentioned, whereas Caraka, *Suśruta*, Vāgbhaṭa and Mādhava refer to only five types; Śārṅgadhara's sixth (caused by *ghṛṇā*, disgust) and seventh types (caused by pregnancy) are, however, included in the fifth one (the *āgantujvara*) of the other treatises.

Thirst (*trṣṇā*) is of six types, as distinct from the five of Caraka and the seven of *Suśruta* and Mādhava, but in general agreement with Vāgbhaṭa. The varieties of *mūrchā* are the same as those distinguished by Caraka and Vāgbhaṭa, whereas *Suśruta* and Mādhava prefer a different classification. Śārṅgadhara follows Mādhava in mentioning *bhrama*, *nidrā*, *tandrā* and *saṃnyāsa* after *mūrchā*; he deviates from Mādhava

by including glāni in this group of related disorders, as does Suśruta. Seven types of mada are enumerated, the same as those of Caraka and Vāgbhaṭa; mada is not a separate disease in the *Mādhavanidāna*, where it is referred to in the chapters on madātyaya and unmāda. Twenty varieties of bhūtonmāda are distinguished¹⁰⁷¹ versus seven in the *Carakasamhitā*, nine in the *Suśrutasamhitā* and *Mādhavanidāna*, and eighteen in Vāgbhaṭa's works; Śārṅgadharma's classification is related to that of Vāgbhaṭa. Four types of āmavāta are recognized; the dvandva varieties of Mādhava are omitted. Eight types of parīṇāmaśūla are enumerated, in contrast with the seven of the *Mādhavanidāna*; Śārṅgadharma adds an eighth type, called jaratpittabhavaśūla.¹⁰⁷² The two varieties of ānāha are the same as those of Suśruta and Mādhava, but the one originating from the āmāśaya is called pratyānāha, a term that may occur here for the first time. A disease recognized by Śārṅgadharma, but rarely occurring in earlier texts and absent from the *Mādhavanidāna*, is urograha.¹⁰⁷³ Eight varieties of gulma are enumerated, in agreement with Vāgbhaṭa, whereas Mādhava has only five of them. The disease called somaroga, appearing for the first time in Vaṅgasena's *Cikitsāsārasaṃgraha*, is accepted by Śārṅgadharma; it is said to be of one type; the variety called mūtrātisāra is absent.¹⁰⁷⁴ A new nosological entity, distinct from vṛddhi and its varieties, may be aṇḍavṛddhi, a disorder usually known as kuraṇḍa in later treatises.¹⁰⁷⁵

Apacī is not mentioned, probably because it was regarded as a variety of gaṇḍamālā, or even identical with it, as in Vāgbhaṭa's works.¹⁰⁷⁶ The disease commonly known as galagaṇḍa, but called gaṇḍālajī by Śārṅgadharma, is said to be of one type, whereas Suśruta and Mādhava distinguish three varieties. Four types of granthi are added to the five of Suśruta and Mādhava, namely those originating from blood, muscular tissue, bony tissue, and ulcers; the same extra varieties, with the exception of that originating from bony tissue, are also described by Vāgbhaṭa. The eight types of sadyovraṇa agree with those of Vāgbhaṭa. Two types of koṣṭhabheda are mentioned, chinnānta and niḥṣṭāntaka.¹⁰⁷⁷ Bone fractures are divided into eight varieties in a manner that differs from that of Suśruta and Mādhava. Four types of burns are mentioned; Suśruta describes the same four types, which are absent from the *Mādhavanidāna*. Eight forms of bhagandara are distinguished: rju, parikṣepin and arśoja are added to the five of Suśruta, just as in Vāgbhaṭa's works.

The group of śūkadōśas, which consists of eighteen varieties in the *Suśrutasamhitā* and *Mādhavanidāna*, has been expanded with six disorders: liṅgārśas, nivṛtta, avapāṭikā, niruddhaprakāśa, and parivartikā; this arrangement resembles that of Vāgbhaṭa, who adds nivṛtta, avapāṭikā and niruddhamāṇi. Mādhava describes liṅgārśas in the chapter on upadaṃśa, but avapāṭikā, niruddhaprakāśa (the same as niruddhaprakāśa and niruddhamāṇi) and parivartikā in the chapter on kṣudrarogas.

Śārṅgadharma's enumeration of sixty kṣudrarogas differs from the arrangement found in other treatises. Additions, in comparison with the *Mādhavanidāna*, are: koṭha,¹⁰⁷⁸ rājikā,¹⁰⁷⁹ and rakasā;¹⁰⁸⁰ these disorders are also regarded as kṣudrarogas by Vāgbhaṭa. Mādhava's eight types of visphota and fourteen varieties of masṭrikā, described in separate chapters of his *Nidāna*, form part of Śārṅgadharma's kṣudrarogas, in agreement with Vāgbhaṭa again. Eleven kṣudrarogas from Mādhava's list, which comprises a total of forty-two, are absent from Śārṅgadharma's series, namely ajaga-

llikā, aruṃṣikā, avapāṭikā, dāruṇaka, indralupta, niruddhaprakāśa, nyaccha, pādādārī, palita, and parivartikā. Some of these disorders are classified differently, for example among the śūkadoṣas, bālarogas and kapālarogas. Mādhava's śūkaradaṃṣṭraka, a kṣudraroga not described in earlier works, has been accepted by Śārṅgadhara.¹⁰⁸¹ One variety of visarpa, the one caused by agnidāha, has been added to the eight of Mādhava. The disease called śleṣmapitta, described in a verse probably added later to Mādhava's chapter on amlapitta, is not mentioned.

Śārṅgadhara lists eighty types of vātaroga, forty of pittaroga, and twenty of kapharoga, related to those mentioned in the *Carakasamhitā*,¹⁰⁸² but without being identical.¹⁰⁸³ A list of ten raktarogas, completely different from that found in the *Carakasamhitā*,¹⁰⁸⁴ forms also part of Śārṅgadhara's nosological system; these ten diseases caused by blood are: gaurava (a feeling of heaviness), raktamaṇḍalatā (the appearance of round, red patches on the skin), raktanetratva (red eyes), raktamūtratā (red-coloured urine), raktaniṣṭhivana (spitting of blood), raktapiḍakādarśana (the appearance of red boils), auṣṇya (a feeling of heat), pīḍā (pain), and pāka (inflammation or suppuration).

The diseases of mouth and throat (mukharoga) are seventy-four in number and arranged in the same manner as in Vāgbhaṭa's works, with one particularity, namely the omission of gaṇḍālājī, mentioned separately by Śārṅgadhara. The diseases of the ears (karṇaroga) comprise thirty disorders, the same twenty-five as distinguished by Vāgbhaṭa, and five extra ones, located at the base of the ear (karṇamūla). These five, arising from vāta, pitta, kapha, saṃnipāta and rakta, are not included in the group of karṇarogas in earlier works. Śārṅgadhara's ten diseases of the head (śīroroga) are the same as those of Vāgbhaṭa. He also follows Vāgbhaṭa in enumerating nine diseases of the scalp (kapālaroga): upaśīrṣaka, aruṃṣikā, vidradhi, dāruṇa, piḍikā, arbuda, indralupta, khalati, and palita. Mādhava regards six among these as belonging to the kṣudrarogas, does not describe upaśīrṣaka, and considers indralupta and khalati to be synonyms. The eye diseases (netraroga) are the same again as those recognized by Vāgbhaṭa; their number is ninety-four.

The five puṃstvarogas (sexual perversions) and eight śukradoṣas have been borrowed from the *Suśrutasaṃhitā*. The women's diseases (strīroga) consist of eight ārtavadoṣas, borrowed from Suśruta, and the usual four varieties of pradara. The twenty yonirogas of Śārṅgadhara are composed of a mixture of the disorders of this name recognized by his predecessors. The group of eight garbharogas differs from similar groups in earlier treatises and consists of upaviṣṭakagarbha, nāgodara, makkalla, mūḍhagarbha, viṣkambha, gūḍhagarbhaka, jarāyudoṣa, and garbhapāta; two disorders described by Mādhava, yonisamvaraṇa and saṅga, are absent. The three strīdoṣas, caused by circumstances which make women suffer mentally, form an interesting group, consisting of afflictions induced by an awkward (adakṣa) husband, a female rival (sapatnī), and fate (e.g., widowhood).¹⁰⁸⁵

The group of children's diseases (bālaroga) comprises twenty-two disorders, a larger number than found elsewhere; new members of this group are gudapāka (inflammation of the anal region)¹⁰⁸⁶ and śāyāmūtra (enuresis nocturna).¹⁰⁸⁷ Four types of bālagraha were added by Śārṅgadhara to the usual number of eight, namely

Skanda,¹⁰⁸⁸ Viśākha,¹⁰⁸⁹ Piṭṛgraha and Śuṣkarevatī; the name of the demon (graha), usually called Skandāpasmāra, is Svagraha in the *Śārṅgadharasaṃhitā*.¹⁰⁹⁰

A new group of disorders is formed by the forty-two diseases of the feet (pādaroga), the members of which are not enumerated separately, having already been mentioned under various headings; vātārakta, ślīpada and some kṣudrārogas belong to this group, according to the commentator Ādhamalla. Śārṅgadharā distinguishes moreover fifteen complications (upadrava) of pañcakarman, and eighteen brought about by the injudicious application of sneha, sveda, dhūma, gaṇḍūṣa, añjana, and tarpaṇa. Four kinds of upadrava are caused by heat, cold, śalya, and caustics (kṣāra).¹⁰⁹¹ Śārṅgadharā also mentions disorders originating in the three types of poison, the seven metals (dhātu), seven upadhātus, and seven upaviṣas; this list is completed by disorders brought about by poisonous substances in polluted water and on weapons besmeared with a poison. Itching caused by kapikacchū,¹⁰⁹² polluted water and sūraṇa¹⁰⁹³ is also referred to, as well as swelling caused by bhallāta.¹⁰⁹⁴ The last disorder mentioned is mada, which consists of four varieties, effected respectively by pūga,¹⁰⁹⁵ bhaṅgā,¹⁰⁹⁶ akṣa¹⁰⁹⁷ and kodrava,¹⁰⁹⁸ along with other ones induced by the ingestion of various noxious vegetable substances.

The particularities of Śārṅgadharā's nosological system show that his arrangement of the diseases owes much to Mādhava, but that he chose Vāgbhaṭa as his main guide with respect to the subdivision of nosological entities. Neither Mādhava nor Vāgbhaṭa were followed blindly. Minor deviations from Mādhava's order are rather common,¹⁰⁹⁹ as are subdivisions which disagree with those of Vāgbhaṭa. Noteworthy features of Śārṅgadharā's nosology consist of additions and omissions when compared with the schemes of Caraka, Suśruta, Vāgbhaṭa and Mādhava. Additions are snāyuka, bhasma-ka, two types of bhūtonmāda, jaratpittabhavaśūla, urograha, somaroga, aṇḍavṛddhi, visarpa caused by agnidāha, the five varieties of karṇamūlāroga, the three types of strī-doṣa, śayyāmūtra, and four types of bālagraha.

Śārṅgadharā's arrangement of the diseases was rarely adopted by later authors, but did not fall into complete oblivion, since its influence is detectable in Vedakavi's *Jīvānanda*.

Other special features of the *Śārṅgadharasaṃhitā* are the following. Two gaṇas, the members of which are enumerated by Śārṅgadharā, namely the vīratāravadigaṇa (II.2.102cd–104ab) and varuṇādigigaṇa (II.2.128–129), are modifications of gaṇas of the same name found in Suśruta (Sū.38.10 and 12). Drugs having an effect on male sexual functioning are classified in seven groups: vājīkaraṇa, śukrala, śukrapravartaka and -janaka, śukrapravartana, śukrarecana, śukrastambhaka, and śukraśoṣaṇa (I.4. 14cd–18ab).

New drugs introduced by Śārṅgadharā are: elīya (II.12.56);¹¹⁰⁰ kuṭhāra (II.11.45), also called kuṭhāracchinnā (II.11.47; 12.279);¹¹⁰¹ jvālāmukhī (II.11.14; 12.42, 57, 87);¹¹⁰² pātālagaruṭī (II.11.44);¹¹⁰³ rudantī (I.4.14);¹¹⁰⁴ sthūlababbhūlikā (II.1.12).¹¹⁰⁵ Vegetable substances that had recently been incorporated in the āyurvedic pharmacopoeia are repeatedly prescribed, such as ākāra-kaṇḍa (II.6.162; 12.56), also called ākallaka (II.10.23), and opium (ahipheṇa; I.4.20; II.6.163; 12.20 and 230). Preparations from poisonous plants like dhātūrā (II.12.135 and 191; III.11.130; = dhūrta:

II.12.114; = unmatta: II.12.196), vatsanābha (II.12.117), and viṣamuṣṭi (II.12.196) are not uncommon. *Cannabis* (bhaṅgā, vijayā) rather often occurs in prescriptions (I.4.20; 7.203; II.6.72; 12.256).¹¹⁰⁶ Some new uses of single and compound drugs are mentioned by Śāringadhara.¹¹⁰⁷ A therapeutic technique, already described in the *Carakasamhitā* (Ci.23.66) and consisting of the rubbing of drugs into an artificial wound on the head, has been adopted and developed by Śāringadhara; he employs this type of treatment in cases of saṃnipāta and snake-bite (II.12.121–127ab), as well as in several vāta diseases (III.11.101cd–102).

The purification and killing of metals, minerals and gems, as well as the processing of mercury for internal use, is elaborately described by Śāringadhara, whose saṃhitā is the earliest medical treatise presenting a detailed account of these techniques. Metallic and mercurial preparations figure more prominently in Śāringadhara's work than in those preceding it. The number of metals (dhātu) was increased to seven by Śāringadhara (II.11.1) in order to make them agree with the seven tissues of the body (also called dhātu), though, in addition, a number of nine metals, becoming current later and brought into relation with the nine planets,¹¹⁰⁸ is already met with in his saṃhitā (II.12.3–4ab). The traditions connected with the Siddhas were known to Śāringadhara (II.12.158).

The author

No particulars on the author of the *Śāringadharasamhitā* are known, apart from his name, mentioned in one of the introductory verses (I.1.2) and at the end of the work (III.13.127). The colophons usually call him the son of Dāmodara. The maṅgalācaraṇa and some other verses¹¹⁰⁹ show him to be a Śaiva.

It has frequently been assumed,¹¹¹⁰ on insufficient grounds,¹¹¹¹ that the authors of *Śāringadharasamhitā* and *Śāringadharapaddhati*¹¹¹² are one and the same person.¹¹¹³ This identity has rightly been disputed by P.V. Sharma¹¹¹⁴ and Atrideva,¹¹¹⁵ who both stressed that the two works are very dissimilar and that the elaborate genealogy of the author, found in the *Paddhati*,¹¹¹⁶ is absent from the saṃhitā.

Moreover, the author of the *Paddhati* nowhere refers to himself as a medical expert, nor displays his knowledge of medicine.¹¹¹⁷

Atrideva adduced some examples of subjects, dealt with in the *Paddhati*, which are not treated in the saṃhitā, but might well have been present there if both works had been written by one author, such as the tempering of steel and a recipe for turning grey hair black again. These arguments, taken together, certainly justify the view that *Paddhati* and saṃhitā were written by two different authors.

This conclusion is sometimes thought to be confirmed by two chronological considerations,¹¹¹⁸ namely the supposed existence of a commentary on the *Śāringadharasamhitā* by Vopadeva, who lived in the second half of the thirteenth century, and a quotation from the saṃhitā by Hemādri, who was a junior contemporary and a friend of Vopadeva. Since the *Śāringadharapaddhati* has been compiled in A.D. 1363,¹¹¹⁹ its author lived considerably later than the Śāringadhara who wrote the saṃhitā, if credit is given to the considerations just mentioned. As I shall point out in the section on the date of the *Śāringadharasamhitā*, the commentary of Vopadeva

and Hemādri's quotation can be left out of consideration in this context, which does not affect the conclusion that *saṃhitā* and *Paddhati* were composed by two different authors, but has its consequences for the chronological position of the *saṃhitā*.

P.V. Sharma suggested¹¹²⁰ that the author of the *Śārngadharasaṃhitā* might be the same as Śārngadeva, who wrote the *Samgītaratnākara*¹¹²¹ and *Adhyātmaviveka*,¹¹²² and who held an important office at the court of Siṅghaṇa¹¹²³ (A.D. 1210–1247),¹¹²⁴ one of the kings of Yādavagiri. The major obstacle to this hypothesis consists of Śārngadeva's genealogy, because it is stated in his *Samgītaratnākara*¹¹²⁵ that he was a son of Soḍhala and grandson of Bhāskara, whereas the author of the *Śārngadharasaṃhitā* is said to be a son of Dāmodara. P.V. Sharma solves this problem by supposing that the authors of *saṃhitā* and *Paddhati* were already regarded as identical in early times, as a result of which the author of the *saṃhitā* is presented as a son of Dāmodara in the colophons of a number of MSS. Arguments favouring the identity of Śārngadeva and the author of the *saṃhitā* are, in P.V. Sharma's opinion, firstly Śārngadeva's expert knowledge of medicine,¹¹²⁶ displayed, especially in the field of anatomy, in his *Samgītaratnākara* and *Adhyātmaviveka*, and, secondly, that the *Śārngadharasaṃhitā* shows the influence of the *Gadanigraha* of Śoḍhala, Śārngadeva's father. Almost needless to say, this hypothesis is very weak, because there was no reason at all to confuse the authors of *saṃhitā* and *Paddhati*, while, moreover, the attribution of the *Gadanigraha* to the Soḍhala who was Śārngadeva's father is completely arbitrary, though not impossible with regard to chronology. P.V. Sharma, who expresses some doubt as to the correctness of his hypothesis, concludes that Śārngadeva was either the same as the author of the *Śārngadharasaṃhitā* or a different person living in the same age.¹¹²⁷

Date

The terminus post quem of Śārngadhara can be inferred from information contained in the commentaries on his *saṃhitā* by Āḍhamalla and Kāśīrāma. The former has recorded that Śārngadhara consulted a commentary on Vṛnda's *Siddhayoga*,¹¹²⁸ while the latter has mentioned that Śārngadhara was acquainted with Tīsaṭa's work.¹¹²⁹ Kāśīrāma's commentary contains two remarks¹¹³⁰ which imply that Śārngadhara made use of Vaṅgasena's work, one of these¹¹³¹ pointing to his posteriority to Trivikrama, who evidently commented upon Vaṅgasena's treatise, and finally a remark¹¹³² suggesting that Vopadeva preceded Śārngadhara.

These data, if reliable, lead to the conclusion that Śārngadhara cannot have lived earlier than about 1300, which conflicts with P.V. Sharma's¹¹³³ and Atrideva's¹¹³⁴ claims that he is quoted by Hemādri.¹¹³⁵ The latter's so-called quotation from Śārngadhara can, however, be disregarded as a clue to his date, because no source is mentioned by Hemādri and, moreover, only the first of the two verses quoted is found in the *Śārngadharasaṃhitā*.

The often repeated¹¹³⁶ claim that Śārngadhara must be earlier than Vopadeva, because the latter wrote a commentary on the former's *saṃhitā* is not valid since such a commentary has never been written. The error derives from Weber's Catalogue of Berlin MSS, where MS Nr. 937 is described as containing the *Dīpikā*, called *Gūḍhārthadīpikā*, composed by Vopadeva, son of Keśava, on the *pūrvakhaṇḍa* of

the *Śārngadharaṣaṃhitā*.¹¹³⁷ As those parts of the text which were printed in the catalogue verbally agree with Kāśīrāma's commentary, called *Gūḍhārthaḍīpikā*, the MS evidently contains the first part of that work.

Indications with regard to Śārngadhara's terminus ante quem are provided by the authors and works referring to or quoting him. The earliest of these are the *Paraśurāmapratāpa*, dating from the first half of the sixteenth century,¹¹³⁸ and Gaṇeśadaivajña's commentary, composed in 1528.¹¹³⁹

The evidence collected shows that the author of the *Śārngadharasamhitā* lived later than Trivikrama (of unknown date), who wrote a commentary on Vaṅgasena's treatise (A.D. 1050–1100), or even later than Vopadeva (second half of the thirteenth century), if Kāśīrāma's remarks are trustworthy and correctly interpreted, and before the author of the *Paraśurāmapratāpa* and Gaṇeśadaivajña. So he should be placed in the period 1100–1500 or 1300–1500. Śārngadhara may have borrowed the definitions of a series of technical terms from Vaṅgasena,¹¹⁴⁰ which would corroborate his posteriority to the latter. P.V. Sharma's assertion¹¹⁴¹ that Śārngadhara used Soḍhala's *Gadanigraha* as a model for his work, which would prove that Śārngadhara is later than Soḍhala, is not convincing, because the order of the pharmaceutical preparations in the two works differs considerably, while, moreover, identical prescriptions seem to be absent, though a restricted number of recipes from the *Śārngadharasamhitā* also occur in Vaṅgasena's treatise and the *Cakradatta*.¹¹⁴² The much more developed stage of rasaśāstra in Śārngadhara's work, compared with Vaṅgasena's treatise and the *Cakradatta*, as well as the changes in the pharmacopoeia, are indicative of a considerable interval of time between the latter two works and the *Śārngadharasamhitā*.

Though the *Śārngadharasamhitā* has usually been placed in the thirteenth century,¹¹⁴³ it might well be preferable to assign it to the fourteenth century, which would agree with the data provided by Kāśīrāma's commentary.¹¹⁴⁴

Commentaries

Three commentaries are known:¹¹⁴⁵ (1) the *Pradīpikā* by Āḍhamalla;¹¹⁴⁶ (2) the *Gūḍhārthaḍīpikā* by Kāśīrāma; (3) the *Āyurvedaḍīpikā* or *Gūḍhāntaḍīpikā* by Rudrabhaṭṭa.

(1) Āḍhamalla's commentary, called *Pradīpikā* in its introductory verses and *Śārngadharadīpikā* in the colophons, is the oldest one. In the introduction the author traces his descent in saying that he is of Śrīvāstava lineage,¹¹⁴⁷ that his grandfather was called Cakrapāṇi¹¹⁴⁸ and his father Bhāvasiṃha.¹¹⁴⁹ He adds that both were physicians and that Bhāvasiṃha, who was an expert in Suśruta, earned great fame and was honoured by the king. Āḍhamalla lived in Hastīkāntapurī,¹¹⁵⁰ situated on the banks of the Carmaṇvatī,¹¹⁵¹ during the reign of Jaitrasīṃha.¹¹⁵² The introductory verses also indicate that Āḍhamalla, who refers to himself as knowing only a restricted number of treatises (nibandha), based his commentary on the words of his teacher.¹¹⁵³ Āḍhamalla's devotion to Kṛṣṇa can be inferred from the concluding verses. One of these concluding verses presents a lacuna, which is especially unfortunate because it may either refer to another work by the same author, a pañjikā in 11,000 verses, or

contain information on the date of completion of Āḍhamalla's commentary.

Authors and works quoted or referred to by name in Āḍhamalla's commentary are: Agniveśa (I.7.77cd–79ab;¹¹⁵⁴ III.13.125–128), Amara (I.1.1.), *asmadīyasampradāya* (III.11.122cd–128ab), Bhāluki (III.3.9–11), *Bhānumatī* (III.5.31; 6.23), Bhaṭṭāraka-hariścandra (III.11.108–110ab), Bhoja,¹¹⁵⁵ Bhrgu (III.13.125), Cakra (II.2.43–75; 7.13–16; 9.58–60ab; III.3.14; 5.33; 10.13cd–19ab; 11.108–110ab), *Cakradatta* (II.8.10–22ab; III.4.18cd–20ab; 5.7cd–15ab; 6.8–11ab and 24cd–28ab; 8.14cd–15 and 24–32ab; 10.1–5), Cakṣuṣyeṇa (I.7.154), Caraka (often), *Dravyaguṇāvalī*¹¹⁵⁶ (I.4.1a-b), *Drḍhabala* (I.7.105–115ab; III.3.14 and 30; 4.26cd–33; 5.7cd–15ab and 22–30; 6.11; 8.2 and 14cd–15), Gadādhara (I.7.153–171ab), Gayadāsa (I.7.171cd–172ab), *Guṇāvalī*¹¹⁵⁷ (II.10.7cd–10ab), Hārīta (III.13.125), Hiranyākṣa (I.7.189–191ab), Jaijyāta (I.1.6; III.3.14), *jyotiḥśāstra* (I.3.11cd–13ab), Kārttika (III.10.13cd–19ab), Kārttikācārya (I.7.151cd–152), kāśmīrāḥ (III.8.2), Kāśyapa (I.7.196cd–202), Kharanāda (II.9.142–146ab), Khārāṇādi (III.4.12), Mādhava (often), Mādhavācārya's *Svasaṃgraha* (I.7.149cd–151ab), *Mādhavanidāna* (I.7.80cd–82ab), *Mādhvasaṃgraha* (I.7.153–171ab), *Mūlabhārata* (I.5.48cd–50ab), Nāgārjuna (II.1.1.44–45), *Nāmamālā* (II.1.12), *Nāmasaṃgraha* (I.7.139), *Nighaṇṭu* (II.6.9cd), Nimi (I.7.153–171ab), Pārāśara (III.6.3), *Paribhāṣā* (II.10.3), Ratnaprabhākara, i.e., Nīścalakara (III.8.14cd–15), Ravigupta (III.8.2), *Saṃgraha* (I.7.115cd–121), Sanaka (I.7.38–39), Śārngadhara (often), *Śivamata* (II.11.1), Sudāntasena (III.2.6), Suśruta (often), *suśrutādhyaṇināḥ* (II.6.23–24ab), *tantrāntara* (often), Tīsaṭa (Trisaṭa ad II.6.84; Tīsaṭa ad III.4.1cd–3a-b),¹¹⁵⁸ Vāgbhaṭa (often), *Vaidyālaṅkāra* (III.2.31ab), *Vaidyaprasāra* (II.7.13cd–15), Videha,¹¹⁵⁹ *Viṣṇusaṃhitā* (II.6.81–89),¹¹⁶⁰ *Vṛddhabhoja* (I.7.27cd–28), *Vṛddha-kāśyapa* (I.7.180d–182ab), Vṛnda (II.8.10–22ab; III.3.14), and *Vṛndaṭippaṇakāra* (II.8.14).

According to P.V. Sharma¹¹⁶¹ the *Rasaratnasamuccaya* is repeatedly quoted, which is hard to prove, since this work contains many verses from earlier treatises and is not mentioned by name.¹¹⁶²

A large percentage of Āḍhamalla's quotations is not referred to a source mentioned by name. The *Mādhavanidāna* is repeatedly quoted anonymously.¹¹⁶³

Āḍhamalla consulted many manuscripts;¹¹⁶⁴ he was interested in the correct readings of Śārngadhara's text, as shown by the variants recorded in his commentary and the additional verses occurring in part of the MSS at his disposal.¹¹⁶⁵

Medicinal plants are occasionally described;¹¹⁶⁶ many synonyms are recorded, as well as vernacular names.¹¹⁶⁷

Āḍhamalla's alchemical knowledge appears from his comments on chapters eleven and twelve of the *Madhyamakhaṇḍa*. He mentions among the implements of an alchemist's workshop two types of *tuḷābhājana* (*tuḷā* and *ghaṇṭaka*), three types of *khalva* (*pāṣaṇa*-, *loha*- and *tāmra*khalva), two types of *kaṇḍanī* (*śilā*- and *pāṣāṇakaṇḍanī*), three types of *koṣṭhikā* (*jāla*-, *kharpāra*-, *bhūmikoṣṭhikā*), two types of *bhastrikā* (bellows; *karpara*- and *mukhabhastrikā*). *Mūṣās* are divided into *apakva* and *pakva* types; the *vajramūṣā* is *apakva*; *pakva* types are *gostanā*, *andhamūṣā*, *nalikāmūṣā*, *sampuṭīmūṣā*, *ḍholīmūṣā*, *istikāmūṣā*, *kṣāramūṣā*, *saindhavādilavanamūṣā*, *kharpamūṣā*, *kokilā-khyamūṣā*, etc. Two types of *saṇḍīśa* are mentioned (*pattra*- and *kākamukhasaṇḍīśa*).

Four types of puṭa are acknowledged: tuṣa-, karīṣa-, upala-, and khadirādikāṣṭhapuṭa. The yantras listed are adhaḥpātana-, agnisoma-, bāṇa-, bhūdhara-, cākī-, cakra-, cāraṇa-, ḍamaruka-, dolā-, gajadantabhājana-, gandhakaṭaḥnikā-, garuḍa-, jālikā-, kacchapa-, kāṁsyabhājana-, kaṭāha-, mūṣā-, niyāmaka-, pāṣāṇa-, pātāla-, sāraṇa-, śilā-, tulā-, ūrdhvapātana-, vālūkā-, and vaiṣṇanalikāyantra.¹¹⁶⁸

Āḍhamalla's date is not elucidated by his sources¹¹⁶⁹ and depends in the first place on the identification of his royal patron Jaitrasimha, who was not the Cāhamāna king of that name, as that would lead to placing Śāringadhara not later than about A.D. 1250. Āḍhamalla may provisionally be assigned to the fourteenth century.¹¹⁷⁰ The terminus ante quem is provided by a quotation from him in Vallabhabhaṭṭa's commentary on Śāringadhara's *Triśaṭi*.

Āḍhamalla is cited in Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*; Āḍhamalla and his *Śāringadharatippaṇī* are also quoted in Guḷrā-jārmamiśra's commentary on the *Āyurvedaprakāśa*.

Parts of Āḍhamalla's *Pradīpikā* are (anonymously) reproduced almost verbatim in an interpolated portion of the incompletely preserved text of Niścalakara's *Ratnaprabhā* on the *Cakradatta*. This portion, found in the two BORI MSS,¹¹⁷¹ covers the larger part of the chapter on netraroga, a chapter on rasādiśodhanamāraṇa (absent from the *Cakradatta*), and the chapter on sirāvyadha. The text commented upon is not that of Cakrapāṇi's treatise, but has been borrowed in toto from the *Śāringadharasaṃhitā*.¹¹⁷²

Both text and commentary contain numerous variants which are valuable for the establishment of a correct text of the *Śāringadharasaṃhitā* and Āḍhamalla's commentary.

The unknown author of the interpolated portions adds some references to sources left unmentioned by Āḍhamalla. These sources are: Bhāluki (ad netraroga 155); *Carakottaratana* (ad netraroga 38, 39, 71, 74–76); Jatūkarna (ad netraroga 60–61); *Siddhasāra* (ad netraroga 44); Suśruta (ad netraroga 152 and 155); Vāgbhaṭa (ad netraroga 152 and 154). The date of the author is posterior to that of the *Yogaratanākara*, which was also drawn upon for a chapter he added. This agrees with the date of one of the BORI MSS (Nr. 63), completed in Bikaner in A.D. 1727.¹¹⁷³

(2) Kāśīrāma wrote a commentary called *Gūḍhārthadīpikā*,¹¹⁷⁴ which covers the whole of the *Śāringadharasaṃhitā*.¹¹⁷⁵ He does not give us any particulars on his person, except from mentioning at the end that he completed his work under the reign of Shāh Salem, while it also becomes clear from the concluding verses that he was a devotee of Kṛṣṇa. Shāh Salīm has sometimes been identified as the second son and successor of the Afghan ruler Sher Shāh (1540–1545), who died young in 1554,¹¹⁷⁶ which would place Kāśīrāma in the middle of the sixteenth century. According to P.V. Sharma, in whose view this identification cannot be endorsed because Kāśīrāma quotes the *Bhāvaprakāśa*,¹¹⁷⁷ which dates from the same period, the Shāh Salīm mentioned at the end of the *Gūḍhārthadīpikā* must be Jahāngīr (1605–1627), who was called Salīm before his succession to Akbar's throne.¹¹⁷⁸ This view may be correct, though it can be objected that Kāśīrāma does not refer to the *Bhāvaprakāśa* by name and the pertinent verse may derive from some other source put to use by Bhāvamīśra.

Works and authors referred to or quoted by Kāśīrāma are: Agniveśa (III.3.1), *Aśvinīkumāramata* (II.9.93–98), Ātreya (II.9.17–19ab), Bheḍa (III.3.9–11 and 14), Bhoja, Caraka, *Gītā* (I.5.57cd–58), Jaijāta (II.9.8), *Madanavinoda* (II.11.40cd–43),¹¹⁷⁹ *Mādhavanidāna* (I.7.12–13), *Madhukośa* (I.7.2–7ab), Nāgārjuna (II.11.48cd–53ab), *Nidāna* (I.7.80cd–82ab, 83–86, 100cd–101, 142–144ab, 146cd–149ab, 149cd–151ab, 153–171ab), *Paribhāṣā* (III.1.6), *Pātañjala* (II.11.48cd–53ab), *Pathyā-pathyanighaṇṭu*¹¹⁸⁰ (II.11.40cd–43), Rāvaṇa (I.5.48cd–50ab), *Śataśloki* (II.2.88–94; 6.54–57),¹¹⁸¹ *Suśruta*, *Tīsaṭa* (II.9.66cd–71; III.3.1),¹¹⁸² *Trivikrama* (II.11.60–61ab), *Vāgbhaṭa*, *Vaṅgasena* (II.2.4 and 88–94; 6.54–57; 7.40–49; 9.66cd–71; 11.60–61ab), *Vaṅgasenādīnibandhakāra* (II.6.54–57), *Vaṅgeśvara* (II.11.40cd–43ab), *Viśva* (III.11.1–2), *Viśvakośa* (II.1.2), *Vopadeva* (II.6.54–57),¹¹⁸³ *Vopadevaśataśloki* (II.2.88–94; 6.105cd–107), *Vṛddhasuśruta* (I.7.2–7ab), *Vṛnda* (II.2.4, 88, 162–163ab; 6.105cd–107; 9.66cd–71), and *Vyāḍi* (I.1.1.).^{1184, 1185}

This list enables us to infer that Kāśīrāma is at least later than Madanapāla and probably later than Kaiyadeva. This does not solve the identity of Shāh Salīm.

(Kāśīrāma's) *Gūḍhārthadīpikā* is quoted in Yogendranātha's *Āyurvijñānaratnākara*.¹¹⁸⁶

Kāśīrāma is sometimes confused with Kāśīnātha, the author of the *Ajīrṇama-ñjarī*.¹¹⁸⁷

Another medical author, also called Kāśīrāma, wrote a *Vaidyasarvasva*,¹¹⁸⁸ about which almost no particulars are known.

(3) Rudrabhaṭṭa or Rudradharabhaṭṭa,¹¹⁸⁹ son of the physician Konerībhaṭṭa, and royal physician to 'Abdu'l-Rahīm Khān-i-Khānān, wrote a commentary, called *Āyurvedadīpikā* or *Gūḍhāntadīpikā*,¹¹⁹⁰ on the *Śārṅgadharaśaṇhitā*, which has been preserved incompletely¹¹⁹¹ and is said to resemble Āḍhamalla's commentary.¹¹⁹² The same author composed a commentary on Lolimbarāja's *Vaidyajīvana* and a comprehensive treatise on therapeutics.¹¹⁹³ According to some, he also wrote a *Samnipātakalikā*.¹¹⁹⁴ Kṛṣṇabhaṭṭa, Konerībhaṭṭa's great-grandfather, has been credited with a commentary on the *Carakasāṇhitā*.¹¹⁹⁵ As 'Abdu'l-Rahīm, the son of Bairam Khān, who was the guardian and protector of the young Akbar, lived during the latter part of the sixteenth and the first part of the seventeenth century, Rudrabhaṭṭa lived in that same period.

The *Trīsaṭī* by Śārṅgadhara

The *Trīsaṭī*¹¹⁹⁶ or *Jvaratṛīsaṭī*,¹¹⁹⁷ sometimes called *Vaidyavallabha*,¹¹⁹⁸ is a monograph on fevers by Śārṅgadhara.¹¹⁹⁹

Contents

The work consists of 330¹²⁰⁰ skillful verses in various metres and has some resemblance to a *kāvya*.¹²⁰¹

It begins with a benedictory verse devoted to the sun god, followed by stanzas in praise of Dhanvantari, the Aśvins, and the author's guru, the ascetic (yatipati) Vaikuṇṭhāśrama (1–5). The subject of the treatise is introduced by some verses on the myth-

ical origin of fever (6–9) and its names when occurring in various living beings and even inanimate substances (10–12). The pathogenesis and prodromes of fever are described (13–17), followed by the symptoms and treatment of fevers by one (18–37) and two (38–54) doṣas. A large part of the work is devoted to saṁnipāta fevers. After enumerating the symptoms of saṁnipāta fever in general, and the varieties called abhinyāsa, hataujas and saṁnyāsaka in particular, the therapy of this fever is dealt with (55–68). Two series of thirteen distinct saṁnipāta types follow (70–171 and 172–188). The names and symptoms of the first series, consisting of saṁdhiga, antaka, rugdāha, cittabhrama, karṇaka, kaṇṭhakubja, śītāṅga, tandrika, pralāpaka, raktaṣṭhīvin, bhugnadṛś, abhinyāsa, and jihvaka, are also found in the *Bhāvaprakāśa* (cikitsā 1.493–505) and *Yogarātnākara* (160–162), but in a changed order and differently worded; the treatment of each type is separately described after the enumeration of its signs; these verses were incorporated unchanged in the *Bhāvaprakāśa*. The names and symptoms of the second series, consisting of antardāha, daṇḍapāta, antaka,¹²⁰² kumbhīpāka, prorūnāva, pralāpin, eṇīdāha, bhūtahāsa, ajaghoṣa, hāridra, saṁśoṣin, saṁnyāsa, and yantrāpīḍa, were also included in the *Bhāvaprakāśa* (cikitsā 1.510–522), though in a changed order.¹²⁰³ As the fevers of this second series, called upasaṁnipātas by the commentator, are incurable, the patient is advised to regard Nārāyaṇa and the water of the Ganges as his only refuge (188).¹²⁰⁴

The remaining part of the work is concerned with the characteristics of incurability of fevers (189–192), the eight ways (prakāra) in which fever presents itself, namely prākṛta, vaikṛta, saumya, tīkṣṇa, sāma, nirāmaka, antarvega, and bahirvega (193–197), doṣapāka and dhātupāka (198–199),¹²⁰⁵ the irregular fevers (viśama-jvara; 200–216), pralepaka fever (217), the symptoms of fevers which have reached the seven tissues (dhātu) of the body (218–223), the therapy of the irregular fevers (224–269), the symptoms and treatment of fevers beginning with chills (śītapūrva) or sensations of warmth (dāhapūrva) (270–283), the religious therapy of fevers (284–297), the four types of exogenous (āgantū) fevers, namely those caused by abhigāta, abhiṣaṅga, abhiśāpa and abhicāra, together with their treatment (298–304), the complications (upadrava) of fever and their treatment (305–323), the synonyms of fever (324), the signs of release from fever (325–326), and what has to be avoided by a patient suffering from fever (327).

The work ends with three verses containing information on the author.

The *Triśatī* is quoted in the *Amṛtasāgara* (as the *Triśatagrantha*), Hariprapanna's *Rasayogasāgara*, and Yādava-jī Trikama-jī Ācārya's *Siddhayogasamgraha*.

Special features

Religious practices form a substantial part of therapy in the *Triśatī*.¹²⁰⁶ Some rasauśadhas are also present.¹²⁰⁷

Worthy of mention are the following names of medicinal plants: ākalakṛt (168),¹²⁰⁸ āsāluka (113),¹²⁰⁹ babbūla (157), hārahūrā (41; 86),¹²¹⁰ jvālāmukhī (160), kāravikā (321),¹²¹¹ kuliñja (168), rājīphalā (105),¹²¹² tīvra (128, 153, 164),¹²¹³ and vallavadāru (142).¹²¹⁴ Opium is twice prescribed (161 and 164).¹²¹⁵

The author

Śārṅgadhara¹²¹⁶ informs us that he is a son of Devarāja, who, of nāgaravaṃśa stock, was a learned poet, honoured by kings and scholars (328). The author was a pupil of Vaikuṇṭhāśrama (4). At the end of his work he praises Śiva and his consort (329). According to Indian scholars, Śārṅgadhara, being a brāhmaṇa of nāgaravaṃśa lineage, lived in Gujārāt.¹²¹⁷

Date

The author of the *Triṣaṭī* was dated to the thirteenth-fourteenth century by G. Hāldār,¹²¹⁸ whereas P.V. Sharma¹²¹⁹ and Atrideva¹²²⁰ assign him to the fifteenth century. The prescription of drugs like ākalakṛt, jvālāmukhī, and tīvra indicates that he is not earlier, but probably later, than the author of the *Śārṅgadharaśaṅhitā*, while he is anterior to Bhāvamīśra who incorporated verses from the *Triṣaṭī* in his *Bhāvaprakāśa*. Hence he may provisionally be placed in the early fifteenth century.

Commentaries

At least three commentaries were written on the *Triṣaṭī*: (1) the *Vaidyavallabha* by Vallabhabhaṭṭa;¹²²¹ (2) the *Siddhāntasaṃcaya*¹²²² by Nārāyaṇa,¹²²³ son of Kṛṣṇa, brother of Nāganātha and pupil of Nāgeśa; (3) a commentary by Dāsapaṇḍita.¹²²⁴

Authors and works quoted or referred to by Vallabhabhaṭṭa are: *Abhidhāna* (77), *Amara* (4, 6, 76, 154, 284), *Bhāluki* (325), *Bhārata* (7), *Cakra* (20), *Caraka* (20, 69, 224), *Ḍallaṇa* (20), *Halāyudha* (66, 76, 83), *Hārīta* (20), *Karmavipākā* (240, 242, 248, 251, 253, 286, 289), *Madanavinoda* (234), *Madhukoṣakāra* (69), *navīnasuśrutamata* (213), *Nighaṇṭu* (78), *Samgraha* (20, 69), *Siṃhāvalokita* (284),¹²²⁵ *Suśruta* (many times), *Vāgbhaṭa* (many times), *Viśva* (4, 89),¹²²⁶ *Vṛddhasuśruta* (172–173), *Yādava* (220),¹²²⁷ and *Yogamālā* (238).

This list of sources enables us to conclude only that Vallabhabhaṭṭa and the *Triṣaṭī* are probably later than the *Vīrasīṃhāvaloka*, dating from 1383, which is in favour of placing the *Triṣaṭī* in the fifteenth century.

A ṭīkā on the *Triṣaṭī* is quoted in Kṛṣṇadatta's commentary on Trimalla's *Śataśloka*.

R.G. Harshe¹²²⁸ has brought forward that the quotations from *Madguruvalabbhā* and *Vidvadvaidyavallabha* in Śivadatta's auto-commentary on the *Śivakoṣa* may be from Vaidyavallabha's commentary on the *Triṣaṭī*, which, if correct, would fix its terminus ante quem as 1677/78.

Siddharṣi

Siddharṣi was the author of the *Siddhayogamālā*, a short collection of prescriptions against various diseases.¹²²⁹

Siṃha

Siṃha was the author of a *Nibandha*, completed in 1471/72.¹²³⁰

Soḍhala

Soḍhala was the author of two important works, (1) the *Soḍhalanighaṇṭu*¹²³¹ and (2) the *Gadanigraha*.¹²³²

(1) *The Soḍhalanighaṇṭu*

The *Soḍhalanighaṇṭu*¹²³³ consists of two parts, a section on synonyms and homonyms, the *Nāmasaṃgraha*,¹²³⁴ and one on the properties and actions of drugs, the *Guṇasaṃgraha*.¹²³⁵ This arrangement of the material constitutes an unprecedented innovation. The work is written in verse, mostly ślokas, with longer metres in the introductory and closing stanzas of both sections. The *Nāmasaṃgraha* contains about 790 and the *Guṇasaṃgraha* 1,260 verses.

Contents

The *Nāmasaṃgraha* opens with ninety-five verses, the first eight of which are introductory, while the remaining eighty-seven are about the uses of the drugs belonging to the seven groups (varga) distinguished by Soḍhala. The names and synonyms of the drugs belonging to each of these seven vargas are enumerated in seven chapters: (1) guḍūcyādi, (2) śatapuspādi, (3) candanādi, (4) karavīrādi, (5) āmrādi, (6) suvarṇādi, (7) lakṣmaṇādi. The homonymic part of the nighaṇṭu, the *anekārthavarga*, dealing with words designating medicinal substances, is subdivided into four *adhikāras*, which contain words having respectively two, three, four and five meanings (*dvyarthauśadha*, etc). The *Nāmasaṃgraha* ends with a *miśrakavarga*, chiefly on groups of substances, and four closing lines. A short *pariśiṣṭa* section is concerned with synonyms designating water, milk, butter, etc.

The *Guṇasaṃgraha* begins with eleven introductory verses, followed by a *dravyāvalī*, in which the names of all the drugs of the seven vargas are enumerated in their due order. The next part is on *dravya*, *rasa*, *vīrya*, *vipāka*, and *prabhāva*. The main portion consists of a description of the qualities and actions of the drugs, classified according to the seven vargas. Eighteen subsequent vargas treat of the qualities and actions of dietetic articles: *pānīya*-, *kṣīra*-, *dadhi*-, *takra*-, *navanīta*-, *ghṛta*-, *taila*-, *madhu*-, *ikṣu*-, *madya*-, *mūtra*-, *śūka*-, *dhānya*-, *jūrṇā*-, *ṛṇadhānya*-, *śimbidhānya*-, *kṛtānna*-, *anupāna*-, and *māṃśavarga*. The last chapter, *miśrakādhyāya*, deals with miscellaneous subjects. The treatise ends with about eight concluding lines.

Soḍhala states¹²³⁶ that he composed his *Nāmasaṃgraha* in agreement with the names mentioned by Dhanvantari. This raises the question of Soḍhala's sources. In P.V. Sharma's opinion, he was acquainted with the *Dravyāvalī*, and early version of the *Dhanvantarīyanighaṇṭu*, because of this reference to Dhanvantari, the presence of a somewhat similar *dravyāvalī* in both *Soḍhala*- and *Dhanvantarīyanighaṇṭu*, and the close resemblance, as to names and composition, of the vargas in both texts.¹²³⁷

Regarding the last point, the first six vargas bear identical names, but the last one, called *lakṣmaṇādi* in the *Soḍhala*- and *miśraka* in the *Dhanvantarīyanighaṇṭu*, is an exception. The composition of the first six vargas, which is indeed remarkably similar, shows that the *Dhanvantarīyanighaṇṭu* contains a more expanded version of the

same matter when compared with the *Soḍhalanighaṇṭu*,¹²³⁸ though, on the other hand, a number of medicinal plants described by Soḍhala are absent from the *Dhanvantarī-yanighaṇṭu*.¹²³⁹ The relationship between both works deserves special study.¹²⁴⁰

It is too early, in my view, to agree with P.V. Sharma in claiming that the *Soḍhalanighaṇṭu* has a tenth-century version of the *Dhanvantarinighaṇṭu* as one of its main sources.¹²⁴¹

Soḍhala mentions Vāgbhaṭa with reverence¹²⁴² and indicates himself some of his sources: Agniśeṣa, Karāla, *Aṣṭāṅgasamgraha* and *Aṣṭāṅgahṛdaya*.¹²⁴³ In P.V. Sharma's view, he also borrowed from Ḍaḷhaṇa, but the resemblances are rather superficial.¹²⁴⁴

Soḍhala is referred to as a source in Jayaratna's *Jvaraparājaya*.¹²⁴⁵ The *Soḍhalanighaṇṭu* was one of the sources of Raghunāthaḥji's *Nighaṇṭusamgraha*; it is quoted in the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratnākara* and Śivādāsena's commentary on the *Cakraṇṭa*.¹²⁴⁶ Niścala's *Ratnaprabhā* contains an anonymous quotation that is found in the *Guṇasamgraha*.¹²⁴⁷

Special features

The presence of a special chapter on jūrṇā (*Guṇasamgraha* 916–919) is quite a novel feature in a nighaṇṭu.

The list of remarkable names of plants found in Soḍhala's work is very long. Though unusual names occur in all parts of the work, a majority form part of the lakṣmaṇādivarga:¹²⁴⁸ abhilāta (629–630),¹²⁴⁹ andhaka (667),¹²⁵⁰ aṅgāraketu (693–694), āśālīma (691),¹²⁵¹ aśmavalka (665),¹²⁵² avantī (670–672),¹²⁵³ bhṛṅgi (663),¹²⁵⁴ dudum̐bhaṭī (658), ḍilla (651),¹²⁵⁵ devagandhārikā (675), dulupuṣpa (668),¹²⁵⁶ durmīla (651), gaṅgāṭī (683),¹²⁵⁷ ghaṇṭāvalī (664),¹²⁵⁸ ghoṭaka (677), girimatī (652),¹²⁵⁹ guḍadilla (654), jalajambū (694–695),¹²⁶⁰ jayantī (670–672),¹²⁶¹ jayavatī (671–672),¹²⁶² jīrāvalī (687),¹²⁶³ kañcaka (656), karabha (688),¹²⁶⁴ kekidaṇḍā (651),¹²⁶⁵ kīṭagandhā (598),¹²⁶⁶ kṣutkarī (681–682),¹²⁶⁷ laghukacchū (648),¹²⁶⁸ madhyāhnikā (689),¹²⁶⁹ mahārāṣṭrī (696),¹²⁷⁰ maitrī (657),¹²⁷¹ māksika (695), mālāphala ((676),¹²⁷² maṇḍhīḍhi (661), markoṣa (674), māsālī (693), māyuka (660),¹²⁷³ nāgārjunī (673),¹²⁷⁴ nākanārī (649), nārācī (665), narapuṣpa ((690),¹²⁷⁵ nimbi (657),¹²⁷⁶ palāśinī (678),¹²⁷⁷ panaśī (682), parpoṭī (664),¹²⁷⁸ pāṣāṇī (685), phūti (647), siddheśvara (677),¹²⁷⁹ sphūrdana (674),¹²⁸⁰ śṛṅgāritī ((666),¹²⁸¹ taksakī (679), tāmravallī (650),¹²⁸² ūmsadāra (666), ūsandī (696),¹²⁸³ vallīyaka (669),¹²⁸⁴ vaṭu (688), and viṣakharparikā (651).¹²⁸⁵

Noteworthy names from other parts of the *Nāmasamgraha* are, for example: bakāyini (123),¹²⁸⁶ bhilla (73),¹²⁸⁷ bhṛṅgāri (143–144),¹²⁸⁸ kāṣṭhapāṭalā (172),¹²⁸⁹ kṣīranadī (195),¹²⁹⁰ līṅgabhedā (76), raktapādī (51),¹²⁹¹ śārikhayūthikā (628), tiktajīvantī (194), and vārṣikī (621–622).

Remarkable names from the *Guṇasamgraha* are: aṅgārakā (369ab), bodāraśṛṅgaka (579), drakṣūṇa (582), drṣatpunarnavā (249), gippīṭa (583),¹²⁹² godhāmātī (559), jāka (588), jvalatpuṣpa (578),¹²⁹³ lāmikā (582), modayantī (577),¹²⁹⁴ rājāśola (570–571),¹²⁹⁵ srastarī (318–319), and yavaciñcī (37; 394).

The form of several words from these lists indicates that Soḍhala was not averse to the use of Prakrit, a fact which he states explicitly at the end of the *Nāmasamgraha*. A word like gunda,¹²⁹⁶ with the meaning of Sanskrit niryāsa, is freely employed by

him (e.g., *Guṇasaṃgraha* 589). A late loan-word like *sābūna*¹²⁹⁷ is also found in the *Guṇasaṃgraha* (590).¹²⁹⁸

(2) *The Gadanigraha*

The *Gadanigraha* is, like the *Soḍhalanighaṇṭu*, composed of two distinct parts, a collection of formulae arranged according to the several types of pharmaceutical preparations, and a comprehensive text dealing with both *nīdāna* and *cikitsā*, arranged in agreement with the eight *aṅgas* of *āyurveda*. Its model may have been Candrāṭa's *Yogarātna-samuccaya*, which, though mainly a collection of recipes, also contains a therapeutic part called *gadaśānti*.

Contents

The first part of the *Gadanigraha*, the *prayogakhaṇḍa*, counting 2,700 verses¹²⁹⁹ and thus covering about a quarter of the whole treatise, is divided into six *adhikāras*, on *ghṛta*, *taila*, *cūrṇa*, *guṭikā*, *leha*, and *āsava*¹³⁰⁰ respectively. Its structure therefore closely resembles Candrāṭa's *Yogarātnasamuccaya*, which is composed of eight *adhikāras*, namely *ghṛta*, *taila*, *cūrṇa*, *guṭikā*, *avaleha*, *gadaśānti*, *pañcakarman*, and *kalpa*. The chapter on *āsavas* is new in *Soḍhala*'s work; a chapter on *kalpa* and a section (*khaṇḍa*) on *pañcakarman* form part of the *Gadanigraha* too.

Soḍhala mentions his sources by name in part of the *ghṛtādhikāra* only, up to verse 252ab. The authorities mentioned are: *Agniveśa* (32cd–35ab; 40cd–43ab; 66cd–68ab; 92–94; 150–153; 158–161; 162–168; 194–197), *Bheḍa* (72–76; 77–86ab; 95–101; 200–207), *Cikitsākalikā* (233–234), *Hārīta* (43cd–47ab; 47cd–49; 50–54ab; 54cd–60ab; 68cd–71; 89–91; 154; 185–187ab; 208–211), *Jatukarṇa* (169–176ab), *Kharanāda* (102–108ab; 242cd–249ab), *Kṛṣṇātreya* (114cd–118; 176–183ab; 198–199; 222–225ab; 225cd–230), *Kṣārāpāṇi* (183–184), *Siddhasāra* (64cd–66ab), *tantrāntara* (249cd–252ab), *Vāgbhaṭa* (108cd–111ab; 155; 156–157), *Vaideha* (124–129), and *Videha* (212–217).

This procedure is surprising and hard to explain. P.V. Sharma¹³⁰¹ believes that *Soḍhala* indicated these sources according to what he found in Candrāṭa's *Yogarātna-samuccaya*, but that, as Candrāṭa refers to his sources from beginning to end, only a defective copy of the *Yogarātnasamuccaya* was at *Soḍhala*'s disposal.

Other sources of *Soḍhala* may have been *Vṛnda*'s *Siddhayoga*,¹³⁰² *Cakrapāṇi*'s *Cikitsāsaṃgraha*,¹³⁰³ and *Viṅgasena*'s treatise.¹³⁰⁴

One formula¹³⁰⁵ is said to derive from *Lokasena*, a resident of the *Nandavihāra*, who transmitted it to a *bhikṣu*.

Interesting names of drugs found in chapters one to five of the *prayogakhaṇḍa* are: *brahmavinirmītā* (*cūrṇa* 156),¹³⁰⁶ *candrapriyā* (*guṭikā* 452),¹³⁰⁷ *dhūrtapatnī* (*guṭikā* 447),¹³⁰⁸ *ghoṭaka* (*ghṛta* 384),¹³⁰⁹ *indrikā* (*ghṛta* 371),¹³¹⁰ *jivanī* (*taila* 365),¹³¹¹ *jvālāmukhī* (*taila* 524),¹³¹² *kāmsella* (*leha* 45),¹³¹³ *kūṭasālmali* (*cūrṇa* 416),¹³¹⁴ *mahāparpaṭaka* (*taila* 375),¹³¹⁵ *mahoṭikā* (*taila* 339),¹³¹⁶ *parśucchinna* (*taila* 524),¹³¹⁷ *sāraka* (*cūrṇa* 435),¹³¹⁸ *śītapuṣpaka* (*guṭikā* 13),¹³¹⁹ *sudhākarakhyā* (*cūrṇa* 323),¹³²⁰ *sumarkaṭī* (*ghṛta* 397),¹³²¹ *vārdhiphala* (*cūrṇa* 297),¹³²² *vraṇarohiṇī* (*taila* 365),¹³²³ *vṛddhailā* (*cūrṇa* 44),¹³²⁴ and *yakṣaḥastaka* (*ghṛta* 425).¹³²⁵

The chapter on āsavas presents some interesting features. It describes the nine sources of āsavas (20–21), i.e., tvac, pattra, kāṇḍa, puṣpa, sāra, mūla, phala, dhānya, and sitā (sugar); it proceeds with giving details on these nine types. It enumerates six types made of dhānya (122), twenty-six of phala (23–25), eleven of mūla (26–27), twenty of sāra (27cd–28), ten of puṣpa (29–30ab), four of kāṇḍa (30cd), two of pattra (31ab), four of tvac (31cd), and one of sitā (32a). One of the āsavas, namely the varuṇāsava (324–336), is a contribution by Sodhala himself, as indicated by the author.

Noteworthy drugs prescribed in the āsava chapter of the prayogakhaṇḍa of the *Gadanigraha* are: ¹³²⁶ ākallaka (296; 319; 331), ¹³²⁷ babbūli (132), ¹³²⁸ balābīja (294 and 317), dhamāsaka (296), ¹³²⁹ gajaśeluka (297), ¹³³⁰ hārahūrā (368), kabāba (319 and 332), kalaunījī (316), ¹³³¹ kaliṇja (267), ¹³³² kāyaphala (267), ¹³³³ kubjaka (281), mācīkā (142 and 185), mastakī (249), ¹³³⁴ nepālī (243), ¹³³⁵ posta (317), ¹³³⁶ utīṅgaṇa (296), ¹³³⁷ and vijayā (320). ¹³³⁸ Kuliṇjana ¹³³⁹ is found in another chapter (leha 342). The term arka is met with in this treatise for the very first time (āsava 271–274). ¹³⁴⁰ P.V. Sharma claims that opium is also prescribed. ¹³⁴¹

The greater part (7,354 verses) of the *Gadanigraha* is composed of nine khaṇḍas on kāyacikitsā, śālākyaatantra, śalyatantra, bhūtavidyā, kaumāratāntra, viṣatantra, rasāyanatantra, vājīkaraṇatantra, and pañcakarman.

The diseases are systematically assigned to one of the aigas, which is a new feature, and their order only partially agrees with the *Mādhavanidāna* for this reason, though Sodhala basically accepted the latter work as authoritative and incorporated the whole of it in his own treatise. The differences between Mādhava and Sodhala are only of a minor nature. The chapters on vṛddhi and vidradhi interchanged their places. Mādhava's chapters on unmāda and apasmāra were transferred to the khaṇḍa on bhūtavidyā; the chapter on unmāda was divided into two, one on bhūtonmāda, the other on unmāda. The arrangement of the chapters on śālākya differs from Mādhava's; their order is śīro-, karṇa-, netra-, nāsā-, and mukharoga. The khaṇḍa on śalya has ten chapters: granthy-apacy-arbuda-galagaṇḍa, ślīpada, vraṇaśoṣa-dvivraṇīya, sadyo-vraṇa, bhagna, nāḍīvraṇa, bhagandara, upadaṛṇsa, sūkadoṣa, and kṣudraroga, which means that Sodhala accepted Mādhava's order, but made the latter's two chapters on vraṇaśoṣa and śārīravraṇa into one. It should be noted that the chapter on vidradhi is to be found in the khaṇḍa on kāyacikitsā and not in that on śalya, though it forms part of a series of śalya chapters in the *Mādhavanidāna*.

The matter dealing with kaumāratāntra was not only slightly rearranged by Sodhala, in comparison with Mādhava's work, but also expanded. The khaṇḍa on this subject has twelve chapters: pradara, yoniroga, garbhasrāva, mūḍhagarbha, vandhyā, yonīśukradoṣa, sūtīkāroga, stanaroga, yonigāḍhikaraṇa, ¹³⁴² yoninīrlomikaraṇa, ¹³⁴³ bālaroga, and bālagraha. The chapter on yoniroga corresponds to Mādhava's chapter on yonivyāpad and yonikanda, those on garbhasrāva and mūḍhagarbha correspond to Mādhava's chapter on mūḍhagarbha, that on stanaroga agrees with Mādhava's chapters on stanaroga and tanyaduṣṭi, and those on bālaroga and bālagraha correspond to Mādhava's chapter on bālaroga. The chapters on vandhyā, yonīśukradoṣa, yonigāḍhikaraṇa and yoninīrlomikaraṇa, which have no verses on nidāna, are

additions.

The first chapters of the viṣatantra agree with the last chapter of the *Mādhavanidāna*, while the remaining seven are on therapy. The rasāyanatantra is of a composite nature; its first chapter is about rasāyana, the second (auśadhikalpa) is concerned with kalpas useful in rasāyana, the third (bheṣajakalpa) is on various pharmaceutical preparations and measures, the fourth treats of dinacaryā, and the fifth of ṛtucaryā.

The sources of the verses contained in these nine khaṇḍas are indicated in a few instances: *Vṛddhavāgbhaṭa* (kāya 1.450–451), *Suśruta* (1.461–462), and *Vāgbhaṭa* (1.547–549). Parts of the second chapter of the rasāyanatantra (auśadhikalpa) have been taken from the *Aṣṭāṅgasamgraha*.¹³⁴⁴

The *Gadanigraha* is quoted in Hariprapanna's *Rasayogasāgara*, Jayaratna's *Jvara-parāṇaya*,¹³⁴⁵ Viśvanātha Dvivedī's *Rasendrasambhava*, Yādavji Trikamji's *Rasāmṛta*, and in the *Yogarātnākara*. It is one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*, Devasiṃha Viṭṭhal's *Bṛhadāsavāriṣṭasamgraha* and of the *Rasoddhāra-tantra*.

Special features

The *Gadanigraha* contains in those parts which are devoted to nidāna a rather considerable number of extra verses which are not found in the *Rogavinīścaya*. Some of these are appended to the verses taken from Mādhava and indicated as prakārāntare-ṇa lakṣaṇāni,¹³⁴⁶ others occur at various places and describe specific syndromes. Examples of the latter category are: kāya 2.117 (pravāhikā), 5.30–32 (bhasmaka), 7.20 (hāridraka),¹³⁴⁷ 19.160 (kaṭigraha); kaumāra 11.18–21ab (kṣīrālasaka).¹³⁴⁸

Mention is made of some syndromes unknown from earlier texts, such as a pañcāhasaṃbhavajvara (kāya 1.535–536) and ṣaḍdinodbhavajvara (1.536–537).¹³⁴⁹ Soḍhala incorporated the diseases called vardhma (kāya 35.11–12), snāyuka (kāya 40.41–43) and somaroga (kaumāra 1.63–68).¹³⁵⁰ The disorder called śleṣmapitta may have been described for the first time by Soḍhala (kāya 38.12).¹³⁵¹ The terms śītalī (kāya 41.68 and 70) and śītalikā (41.68 and 71–73), used by Soḍhala in his chapter on masūrikā, are among their earliest occurrences.¹³⁵² Remarkable is the fact that Soḍhala regarded blood as a doṣa on the same footing as kapha and pitta, at least in an isolated instance (kāya 19.88). The terms rasendrabhokta (vājīkaraṇa 125) and sūtasevin (vājīkaraṇa 135) tell in favour of the developed state of rasaśāstra in Soḍhala's times.

Religious elements play a minor role in this author's therapeutics, but the mention of a rākṣasī called Dundubhī (kāya 1.556–557), to be honoured in cases of fever, should be noted, as well as the employment of the Mahāmāyūrī (bhūta 1.47).

The plant mārkaṇḍī may well be found for the first time in the *Gadanigraha* (kāya 9.46 and 33.76),¹³⁵³ as well as the substance designated by the term tavarāga (kaumāra 1.55 and 11.121), a synonym of yavāśaṣkarā.¹³⁵⁴ Among the rare medicinal substances from the *Soḍhalanighaṇṭu* only a few are prescribed in the *Gadanigraha*, e.g., palāśinī (kāya 32.103 and 107) and bodāśaṣṭrīga (śalya 8.26).

On the other hand, the *Gadanigraha* mentions a number of medicinal plants which were not included in the *Nighaṇṭu*, e.g., āhulī (kāya 7.64), bhūmijayantī (kāya 1.557), brahmadanāḥī (kāya 1.607),¹³⁵⁵ chohāra (kāya 6.34),¹³⁵⁶ ciñciṇī (kāya 1.220),¹³⁵⁷

citrāṅgī (kāya 1.644),¹³⁵⁸ devaḍaṅgarī (kāya 30.88),¹³⁵⁹ dhārādharma (kāya 1.480),¹³⁶⁰ erakā (kāya 39.55),¹³⁶¹ ghr̥tapura (kāya 35.53),¹³⁶² girikadambaka (kaumāra 11.107),¹³⁶³ gopālakarkaṭī (kāya 29.61),¹³⁶⁴ karṇamoṭa (śalya 3.63),¹³⁶⁵ kaṭudugdhikā (kāya 4.179),¹³⁶⁶ kaṭutṛṇa (kāya 1.480),¹³⁶⁷ kṛṣṇabhramarikā (śālākya 2.83),¹³⁶⁸ kṛṣṇalā (kaumāra 10.7),¹³⁶⁹ kṣīrapotakī (kāya 22.38),¹³⁷⁰ māyāphala (kaumāra 9.17),¹³⁷¹ mūlakaśuṇṭha (kāya 1.406),¹³⁷² pañcānana (kāya 10.69),¹³⁷³ riṅgiṇī (kāya 23.82),¹³⁷⁴ sitakesara (kāya 23.134),¹³⁷⁵ uṭiṇṭa (kāya 41.68),¹³⁷⁶ vaidyāmṛta (kāya 1.476),¹³⁷⁷ vallītaru (kāya 19.201),¹³⁷⁸ varṇojjvala (kāya 31.29),¹³⁷⁹ and vīrabhaṭī (bhūta 1.78).¹³⁸⁰ The term khapura is used as a synonym of niryāsa in jīṅgiṇīkhpura (kāya 19.197). The term amlavetasa is employed in a peculiar way (rasāyana 2.5).¹³⁸¹

The author

Soḍhala belonged, as he indicates himself,¹³⁸² to a Rāyakavāla¹³⁸³ family of the Vatsa gotra. Besides being conversant with āyurveda, he was an expert in sāhitya, jyotiḥśāstra, and vyākaraṇa.¹³⁸⁴ According to some, he was the son of a physician called Svachha, according to others his father's name was Nandana.¹³⁸⁵ The name of his teacher is sometimes said to be Saṅghadayālu¹³⁸⁶ or Asoḍha.¹³⁸⁷ Judging from the maṅgalācarāṇa of *Nāma-* and *Gūṇasaṃgraha*, he was probably a devotee of Sūrya, the sun god.¹³⁸⁸ Since Rāyakavāla brāhmaṇas belong to Gujarāt, it can safely be assumed that Soḍhala lived there, the more so because he uses names of drugs which are current in that region.¹³⁸⁹

P.V. Sharma assumes that the author of the *Soḍhalanighaṇṭu* and *Gadanigraha* is the same as Soḍhala, son of Bhāskara, and father of the Śāringadeva who composed the *Samgītaratnākara* and *Adhyātmaviveka*. This Soḍhala, who was a descendant of Vṛ-ṣaṅga, migrated from Kāśmīr to the South, and was an accountant-general attached to the court of the kings Bhīllama (1175–1191), Jaitra (1191–1210) and Sirīghaṇa (1210–1247) of the Yādava dynasty, an office which was held by Śāringadeva too. The family of this Soḍhala was composed of physicians and even Śāringadeva himself was not only a musician and poet, but also a medical practitioner well versed in āyurveda.¹³⁹⁰ The Yādava king Bhīmadeva II had a copper plate inscribed in the year 1256, recording donations to the son of a Soḍhala from a Rāyakavāla brāhmaṇa family who was an expert in jyotiḥśāstra.¹³⁹¹

Certainty cannot be reached with regard to P.V. Sharma's assumption, but his reasoning does not carry conviction.¹³⁹²

Date

Internal evidence from the *Gadanigraha* proves that Soḍhala is posterior to Ravigupta, Mādhava (the author of the *Mādhavanidāna*), Vṛnda, Tīsaṭa, Candrāṭa, and Vaṅgasena. The absence from the *Gadanigraha* of the majority of the mercurial and other metallic preparations found in the therapeutic treatises of Cakrapāṇi and Vaṅgasena may be due to the Bengal origin of these two authors, for this type of preparation came into use in Bengal first.¹³⁹³

The relationship between the *Soḍhalanighaṇṭu* and an early version of the *Dhanvantarinighaṇṭu*, postulated by P.V. Sharma, cannot be used for chronological purposes,

because the hypothesis is unnecessary and vague. The same author's assumption that Soḍhala borrowed from Ḍalhaṇa is unacceptable. The fact that the names of new drugs borrowed from Islamic medicine occur in prescriptions of the *Gadanigraha* appears to prove that Soḍhala cannot be placed earlier than about A.D. 1200, a date that is in agreement with what is known about Soḍhala's sources. That Soḍhala was active during the first half of the thirteenth century and held some office at the Yādava court may be corroborated by his description of two medicinal preparations named after king Siṃhaṇa.¹³⁹⁴ Soḍhala's terminus ante quem cannot be determined by means of quotations in which the source is specified, but it is very likely that his works were used by many later authors. This seems beyond doubt in the case of Vopadeva, who adopted a number of verses from the *Guṇasaṃgraha* (1068d–1069ab; 1070–1071) in his *Siddhamantraprakāśa* (ad *Siddhamantra* 76), which is in support of placing Soḍhala in the first part of the thirteenth century. Bhāvamiśra is also an author who certainly borrowed from the *Soḍhalanighaṇṭu*.¹³⁹⁵

According to P.V. Sharma,¹³⁹⁶ Soḍhala's works were also put to use by the author of the *Hārītasamhitā*, Keśava, Niścalakara,¹³⁹⁷ Śārrigadhara, Madanapāla, and the author of the *Rājanighaṇṭu*; P.V. Sharma also claims that Niścalakara quotes the *Soḍhalanighaṇṭu*, without mentioning the name of his source.¹³⁹⁸ The *Soḍhalanighaṇṭu* may have been one of the sources for the chapters on materia medica of Tōdara's *Āyurvedasaukhyā*.¹³⁹⁹ The relationship between Soḍhala and the author of the *Mādhavadrayagūṇa* remains undetermined.¹⁴⁰⁰ The available evidence, taken together, is in favour of assigning Soḍhala to the period around 1200.¹⁴⁰¹

The *Mānasollāsa* ascribed to Someśvara

The *Mānasollāsa*¹⁴⁰² or *Abhilaṣitārthacintāmaṇi*,¹⁴⁰³ an encyclopaedic work, ascribed to king Someśvara,¹⁴⁰⁴ contains sections which pertain to medicine.

Contents

The *Mānasollāsa* is a voluminous text of one hundred chapters (*adhyāya*), arranged into five groups of twenty chapters each (*viṃśati* or *prakaraṇa*). It was composed for use by the king and the members of the royal court, and deals with all aspects of daily life. Only those parts of the work which relate to human medicine will be discussed here.¹⁴⁰⁵

The first *viṃśati* has some verses on foods and drinks to be avoided by a king (*abhaḥṣyavarjanādhyaḥ*: 45–52).¹⁴⁰⁶ It also contains a chapter that is largely devoted to medicine (*dīnānāthārtabandhubhṛtyapoṣaṇādhyaḥ*: 135–304). Its main part (*vaidyaka*: 135–292) is about the treatment of various internal diseases, amongst which fever predominates (*jvara*: 145–199),¹⁴⁰⁷ while some verses on surgery are appended to it (285–290). The prescriptions contain well-known vegetable drugs. This section on therapy is followed by a short list of synonyms of some medicinal substances (*auśadhinighaṇṭu*: 292–300).

The second *viṃśati* has an interesting section on *rasāyana* (10–51),¹⁴⁰⁸ verses on the qualities required in a cook (*sūdalakṣaṇa*: 134–137)¹⁴⁰⁹ and a physician

(vaidyalakṣaṇa: 138–145),¹⁴¹⁰ a short section on alchemy, especially auri- and argentification (dhātuvāda-rasāyana: 377–394),¹⁴¹¹ and a section on gems (403–536).¹⁴¹²

The third viṃśati, which deals with enjoyments (upabhoga) of the king, describes the residences (grha; 906–926),¹⁴¹³ baths (snāna; 927–953),¹⁴¹⁴ footwear (pādukā; 954–958),¹⁴¹⁵ ointments (vilepana; 980–1008),¹⁴¹⁶ clothing (vastra; 1009–1041ab),¹⁴¹⁷ garlands (mālya; 1041cd–1048ab),¹⁴¹⁸ ornaments and jewels (bhūṣa; 1048cd–1132ab),¹⁴¹⁹ seats (āsana; 1132cd–1150),¹⁴²⁰ chowries (cāmara; 1151–1160),¹⁴²¹ foods (annabhoga; 1342–1600)¹⁴²² and drinks (pāniyabhoga; 1601–1629),¹⁴²³ which are suitable to a royal person. It adds verses on betel chewing (tāmbūla; 959–979),¹⁴²⁴ ointments for the feet (pādābhyāṅga; 1630–1638),¹⁴²⁵ vehicles (yāna; 1639–1659),¹⁴²⁶ parasols (chattrā; 1660–1669),¹⁴²⁷ couches (śayyā; 1670–1696),¹⁴²⁸ incenses (dhūpa; 1697–1712),¹⁴²⁹ and rules for his contacts with women (yoṣita; 1713–1820).¹⁴³⁰

The fourth viṃśati contains verses on wondrous feats (camatkāravīnoda: 1433–1493), and the fifth verses on alcoholic drinks and the way they should be consumed (madirāpānakrīḍā: 426–514).¹⁴³¹

The *Mānasollāsa* is one of the sources of Basava's *Śivatattvaratnākara*.

Special features

Interesting terms are daka (1.170)¹⁴³² and lāvaṇika (1.171).¹⁴³³ The auśadhanighaṇṭu gives some names of medicinal plants current in Kaṇṇāṭaka.¹⁴³⁴ The main ingredients of the prescriptions in the rasāyana section are śālmālī, hastikarṇī, muṇḍī, śvetabrahmavṛkṣa, and amarī.¹⁴³⁵ A king should make use of the vātātapika method of rasāyana, since the kuṭīpraveśika method is not suited to him.

A disease called jalagraha (2.41)¹⁴³⁶ and the disorder known as lūtā (2.42) are mentioned in the rasāyana section.

Some dishes, both vegetarian and non-vegetarian, described in the section on annabhoga of viṃśati three are:¹⁴³⁷ aṅgārapolikā (1382), antraśuṇṭhaka (1493), bhaḍitraka (1465), bhūṣikā (1481), cakkalikā (1436, 1437, 1439, 1441), ghārikā (1403), ghosaka (1393), ghr̥takarkaṭa (1542), idarikā (1401), karpūramāgiṇī (1563), kāsāra (1387), kaṭakarna (1396), kavacandī (1456), khārakhaṇḍa (1534), kośalī (1482), kṛṣṇapāka (1475), majjikā (1573), nandiyāvarta (1539), pāhalikā (1385), pañcavarṇī (1491), polikā (1383), pūrabhaṭṭaka (1484), puriyala (1461), sohalā (1384), śuṇṭhaka (1435, 1436, 1447, 1458), utkvāthita (1509), upakhaṇḍaka (1515), varṇaśuṇṭhaka (1501), varṣolaka (1417), and vaṭṭimaka (1487).

Noteworthy names of vegetables in the same section are: amlaharidrakā (1563), amlapattūrī (1552),¹⁴³⁸ kahirī (1557), māgiṇī (1563), maruka (1551),¹⁴³⁹ nandana (1555), śeḥhaka (1552), vanamāgiṇī (1563), and vaṭṭāṇa (1393).

The author and his date

Although attributed to king Someśvara himself,¹⁴⁴⁰ the *Mānasollāsa* was obviously composed by some learned paṇḍit attached to the royal court,¹⁴⁴¹ because Someśvara is highly praised in the work.¹⁴⁴²

Someśvara III,¹⁴⁴³ surnamed bhūlokaṃalla, ¹⁴⁴⁴ satyāśrayakulatilaka, ¹⁴⁴⁵ and cā-

lukyābharaṇa,¹⁴⁴⁶ was the son of the famous king Vikramāditya VI and belonged to the line of the Western Cālukyas,¹⁴⁴⁷ who had their capital at Kalyāṇa.¹⁴⁴⁸ He reigned from A.D. 1126 or 1127¹⁴⁴⁹ to 1138.¹⁴⁵⁰

The *Mānasollāsa* was completed in A.D. 1130/31.¹⁴⁵¹

The *Parahitasamhitā* by Śrīnāthapaṇḍita

The *Parahitasamhitā* by Śrīnāthapaṇḍita¹⁴⁵² is a comprehensive medical treatise from South India, chiefly based on the works attributed to Vāgbhaṭa.

Contents

The work consists of three kāṇḍas, the sādharmaṇa-, aṣṭāṅga-, and rasakāṇḍa. The sādharmaṇakāṇḍa contains five chapters (adhikāra): (1) prathamādhikāra, on the three doṣas and their seats, the seven tissues (dhātu) of the body, rasa, vīrya, etc.; (2) dravyaniścayādhikāra, on the properties of foods and medicinal substances; (3) svasthavṛttādhikāra, on the maintenance of health; (4) āturavṛttādhikāra, on the examination of patients and the principles of diagnosis and treatment; (5) prāyaścittādhikāra, on the treatment of diseases by acts of propitiation, etc.¹⁴⁵³ The aṣṭāṅgakāṇḍa has eight chapters: (1) prathamādhikāra, probably concerned with kāyacikitsā; (2) kaumāraṇṭra; (3) bhūtavidyādhikāra; (4) śālākyacikitsā; (5) sarvaśālyacikitsā; (6) viśacikitsā; (7) rasāyanatantra; (8) vājīkaraṇatantra.¹⁴⁵⁴ The contents of the rasakāṇḍa remain unknown, but are probably based on rasaśāstra texts.

The chapter on śālākyacikitsā has 724 and that on sarvaśālyacikitsā 657 verses, mostly śloka, though other metres are also represented.

The chapter on śālākyacikitsā contains sections on netraroga (1–308), kaṇṇaroga (309–368), nāsāroga (369–392), mukharoga (393–551), and śīroroga (552–724). The chapter on sarvaśālyacikitsā is subdivided into sections on śopha, vraṇa and bhagna (1–201), bhagandara (202–241), granthi (242–264), arbuda (265–270), ślīpada (271–285), gaṇḍamālā and apaci (296–308), kṣudraroga (309–515), dehadaurgandhya and dagdha (489–515), and guhyaroga (516–657). The arrangement of the diseases in these two chapters agrees with that adopted by Vāgbhaṭa in most respects and many verses are taken from his works.¹⁴⁵⁵ The series netra-, kaṇṇa-, nāsā-, mukha- and śīroroga is also found in the Uttarasthāna of Vāgbhaṭa's works. Remarkable, however, is the description of thirteen samnipāta fevers in the section on śīroroga (622–673). The names and symptoms of this series, consisting of samdhika or samdhiga, antakastha,¹⁴⁵⁶ drgdāha or rugdāhaka, citta(vi)bhrama, śītāṅga or śītāgātra, tāndrika,¹⁴⁵⁷ karṇṭhakubja, karṇika or karṇaka, bhagnanetra¹⁴⁵⁸ or bhugnaḍrś, raktaṣṭhīvin, pralāpaka or pralāpin, jihvaka, and abhinyāsa (622–636), are also met with, in the same order, in the *Yogaratanākara* (160–162), where they are said to be borrowed from some other treatise. The verses on the treatment of these fevers (637–673) also occur in the *Bhāvaprakāśa* (cikitsā 1. 641–694) and *Yogaratanākara* (184–190).

The order in which the diseases are described in the sarvaśālyacikitsā chapter partially agrees with Vāgbhaṭa, namely from vraṇa up to the kṣudrarogas. The number of the latter is fifty-five in the *Parahitasamhitā* (515), but only thirty-six in Vāgbhaṭa's

works (A.h.U.31.33; A.s.U.36.31). Their number has been increased by including *ṣī-tapitta* (326; 413–423), *amlapitta* (327–328; 424–445), *masūrikā* and *sphoṭa* (329–344; 446–488), *snāyupravṛddhāmaya* (345), ¹⁴⁵⁹ *dehadaurgandhya* (a bad body odour), and *dagdha* (burns) (489–515). The presence of these diseases in the *Parahitasamhitā* indicates that it has been influenced by the *Mādhavanidāna* and Vṛnda's *Siddhayoga* or later works. The guhyarogas, which are said to be forty in number (657), comprise, in the same way as in Vāgbhaṭa's works, all the disorders of the male and female sexual organs. The number of diseases known is indicated in several instances and usually agrees with Vāgbhaṭa. ¹⁴⁶⁰

With the exception of Vāgbhaṭa's works, the *Suśrutasaṃhitā*, and the *Rasaratna-samuccaya*, ¹⁴⁶¹ nothing is known with certainty about Śrīnāthapaṇḍita's sources. ¹⁴⁶² Later authors do not quote him.

Special features

Apart from the peculiarities already referred to, some more features are worthy of mention. The treatment of *galagaṇḍa* and *gaṇḍamālā* is dealt with twice, in the *śālākya* chapter (514–520) and in that on *śālya* (286–308). That part of the *śālya* chapter which deals with the *kṣudrarogas* includes a description of *harītakī* and its seven varieties, and of *āmalakī*, *vibhītaka*, and *triphalā* (390–412). ¹⁴⁶³ At the end of some sections there occur verses on *karmavipāka* (*śālya* 199 and 238–241), but this is not a conspicuous element of the *Parahitasamhitā*, while, on the other hand, religious therapy plays a prominent role (*śālākya* 304–308, 391–392, 547–550, 716–724; *śālya* 199–201, 238–241, 469–470, 657).

The author

The name of Śrīnāthapaṇḍita appears in the colophon at the end of the *śālya* chapter, at the end of the last chapter of the *aṣṭāṅgakāṇḍa*, ¹⁴⁶⁴ and at the end of the *sādhāraṇakā-ṇḍa*. ¹⁴⁶⁵

The name of his work, *Parahitasamhitā*, may refer to the Parahita physicians of Āndhra, though not necessarily so, as the title, which simply means 'saṃhitā promoting the welfare of other (living beings)', may be of the same type as, e.g., *Kalyāṇakāraka*.

Members of families of physicians distinguished by the honorific title Parahita are known from four inscriptions: (a) Parahita III of Ātreya-gotra, who was the *pṛāṇācārya* of Śingayanāyaka of Kōrukoṇḍa, ¹⁴⁶⁶ (b) Bhāskarārya, son of Parahita, of Kāśyapagotra, ¹⁴⁶⁷ (c) Śingānārya, of Kāśyapagotra, son of Villanārya, grandson of Bhāskarārya and great-grandson of Periyavilla Parahita, ¹⁴⁶⁸ (d) Parahita IV, son of Kālānātha Bhaṭṭa. ¹⁴⁶⁹

As appears from these inscriptions, there were two of these families, belonging respectively to the Ātreya- and Kāśyapagotra; the one was an older, well-established Telugu family and the other a Drāviḍa family which came from the South, learnt medicine from the already famous Āndhra family, and also adopted the title Parahita, either as a compliment to their preceptors or to gain prestige. In the inscriptions both families claim that an ancestor, Parahita I, treated a serpent that was suffering from a bone stuck in its throat, and that the success of the treatment resulted in this ancestor's being hon-

oured with the name of sarpavyādhicikitsaka.

The author of the *Parahitasamhitā* may have been a descendant of the Parahita families or one of their pupils, though his name does not occur in the inscriptions mentioning Parahita physicians.¹⁴⁷⁰ Arguments for the view that the title Parahita was not reserved for one or more particular families of physicians, but could be given to any physician well versed in all branches of medicine who devoted his life to the practice of his art are given by P. Hymavathi.¹⁴⁷¹

Date

The Madras MS of the *Parahitasamhitā* is written in nandināgarī,¹⁴⁷² a type of script that was in common use during the time of the western Cālukyas, the Reddī kings of Koṇḍaviḍu¹⁴⁷³ and the earlier dynasties of Vijayanagar rulers; it went out of fashion after the sixteenth century.¹⁴⁷⁴ Hence the MS was copied in the fifteenth or sixteenth century and the text may belong to the fifteenth century. This conclusion is corroborated by the absence of phiraṅgaroga from the *Parahitasamhitā*,¹⁴⁷⁵ a disease described for the first time in the *Bhāvaprakāśa*, which dates from the sixteenth century.¹⁴⁷⁶

Vaṅgasena

Vaṅgasena is the author of a comprehensive textbook,¹⁴⁷⁷ called *Cikitsāsārasaṃgraha*,¹⁴⁷⁸ but often referred to as *Vaṅgasena*¹⁴⁷⁹ after its author. Other titles are *Cikitsā-mahārṇava*,¹⁴⁸⁰ *Cikitsāsaṃgraha*,¹⁴⁸¹ *Cikitsātattvasaṃgraha*,¹⁴⁸² *Vaidyavallabha*,¹⁴⁸³ and *Vaṅgadattavaidyaka*.¹⁴⁸⁴

Contents

Vaṅgasena's treatise contains 11,000–12,000 verses (mostly ślokas) and some prose,¹⁴⁸⁵ arranged in ninety-six chapters. The first 124 stanzas are devoted to general subjects, such as definitions of nidāna, pūrvarūpa, rūpa, upaśaya and samprāpti (1.9–15), the seasons (1.50–52), the constitutions (1.66–72), the doṣas (1.73–79), weights and measures (1.95–113), patients not to be treated (1.114–117), etc. An (incomplete) table of contents of the work follows (1.125–133). The bulk of the treatise (the remaining part of chapter one and chapters two to seventy-five) are about the diseases and their treatment. This section is followed by chapters on sneha, sveda, vamaṇa, virecana, bastikarman, dhūmapāna, kavala, and nasya, svasthavṛtta, pharmacology, ṛtucaryā, ariṣṭa, and definitions of a series of actions of drugs.

The chapters on diseases are arranged by the eight āṅgas: kāya and śalya (sixty-four chapters), śālākya (five chapters), kaumārabhr̥tya (two chapters), agada (one chapter), rasāyana (one chapter), and vājīkaraṇa (one chapter).

The subject matter of the jaladoṣādiyoga chapter is of a remarkable type and does not fit in with this scheme. Besides being concerned with the treatment of disorders caused by polluted water (jaladoṣa), it has some recipes suitable for making women submit to male advances (vaśīkaraṇa), improving the qualities of the sexual organs in males and females, preventing flaccidity of the breasts in women, delaying ejaculation in men, causing sterility or curing it, etc.

The more or less heterogeneous contents of the chapter on rasāyana show a good deal of influence from iatrochemistry; it describes rasāyanayogas for a long series of diseases, treats of śirobasti and the marmans, and enumerates even the nānātmaja diseases.

Vaṅgasena is heavily dependent on Mādhava in the arrangement of the diseases; his verses on nidāna are taken from Mādhava's *Rugviniścaya*,¹⁴⁸⁶ at least for the larger part. This is not to say that almost nothing new is found in Vaṅgasena's nidāna, when compared with Mādhava, for it contains many variants,¹⁴⁸⁷ and its order deviates at many places.¹⁴⁸⁸ More interesting, however, are the numerous stanzas that cannot be traced in Mādhava's work, as well as the new disorders described. Vaṅgasena's therapeutic prescriptions failed to receive much attention,¹⁴⁸⁹ but deserve more study,¹⁴⁹⁰ since a few at least cannot be traced in earlier works.¹⁴⁹¹

The chapters on snehapāna up to that on svasthavṛtta and the chapter on ṛtucaryā are concerned with subjects that follow upon the section on specific therapy in many treatises. Numerous verses in these chapters are taken from Vṛnda's *Siddhayoga* or the *Cakradatta*.

The chapter on dravyagaṇa¹⁴⁹² describes the tastes, etc., the actions of a restricted number of medicinal substances, the best varieties of these, and substitutes to be used in the absence of particular drugs. The gaṇapāṭha chapter enumerates thirty-seven groups of drugs, together with their actions.¹⁴⁹³ The next chapter, based on Caraka,¹⁴⁹⁴ and called saṃśodhanasaṃśamanarasa-dravyādīnām vargādhikāraḥ, has fourteen groups (varga) of drugs, appropriate for the purpose of saṃśodhana and saṃśamana, or dominated by a particular taste. Three chapters (dhānyavarga, māmśavarga, śākphalavarga) are about the properties of articles of food. Two chapters (vyañjanamāṃsavyaṇjana and matsyavyaṇjana) are concerned with prepared foods, and one chapter (dravadravya) is about fluids. The next chapter, on ariṣṭas, contains mainly material from the *Suśrutasamhitā* (Sū.28–33). The last chapter, called dīpanapācanadravyalakṣaṇa, gives definitions of a series of technical terms denoting particular actions of drugs and is the earliest one of this type on the subject.¹⁴⁹⁵ The treatise ends with four verses (vaṅgasenotpatti) on Vaṅgasena's life and work.

Authorities to whom prescriptions are attributed are: the Aśvins,¹⁴⁹⁶ Ātreya,¹⁴⁹⁷ Bhāradvāja,¹⁴⁹⁸ Bhāskara,¹⁴⁹⁹ Girirājaputrī (i.e., Pārvaṭī),¹⁵⁰⁰ Girīśa (i.e., Śiva),¹⁵⁰¹ *Idānibhandhacaryā*,¹⁵⁰² Kāṅkāyana,¹⁵⁰³ Kāśika,¹⁵⁰⁴ Kāśyapa,¹⁵⁰⁵ Nāgārjuna,¹⁵⁰⁶ Śaṃkara,¹⁵⁰⁷ Siddhanātha,¹⁵⁰⁸ Śrīviśvarūpa,¹⁵⁰⁹ Tārā,¹⁵¹⁰ Vaideha,¹⁵¹¹ Videha,¹⁵¹² and Viṣṇu.¹⁵¹³

Vaṅgasena rarely refers to his sources, but three works of Nāgārjuna are mentioned by name: *Lohaśāstra* (rasāyana 474), *Rasāyanasaṃhitā* (rasāyana 166), and *Yogasāra* (strīroga 91). One formula derives from the *Āśvinasaṃhitā* (gulma 76–78). Hārīta's opinion on a particular subject is once referred to (jvara 502). G. Mukhopadhyaya claims that Vaṅgasena quotes Kapilabala.¹⁵¹⁴

Authors and works quoting from or referring to Vaṅgasena or his work are: the *Ārogyāṃtibindu*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the commentary on the *Āyurvedābdhisāra*,¹⁵¹⁵ the *Āyurvedīya Khanijavijñāna*, Bhāvamiśra's *Bhāvaprakāśa*¹⁵¹⁶ and its glosses,¹⁵¹⁷ Binod Lall Sen's

Āyurvedavijñāna,¹⁵¹⁸ the *Bṛhadrasarājasundara*, Candrāṭa's *Yogaratanasamuccaya*,¹⁵¹⁹ Devasiṃha Viṭṭhal's *Bṛhadāsavārīṣṭasamgraha*, Vācaka Dīpacandra's *Laighanapa-thyanirṇaya*, Dālhaṇa,¹⁵²⁰ Gopāladāsa, Gulrājśarmamiśra,¹⁵²¹ Hariprapanna in his *Rasayogasāgara*, Hemādri,¹⁵²² Kāśīrāma,¹⁵²³ Māgacandra, Meghamuni's *Megha-vinoda*,¹⁵²⁴ Niścalakara's *Ratnaprabhā*,¹⁵²⁵ the *Pākamārtaṇḍa* and *Pākārṇava*, the *Rasoddhāraṇa*, Śrīkaṇṭhadatta,¹⁵²⁶ Śrīvāṇeśvara Bhaṭṭācārya's *Rasaratnadīpi-kā*,¹⁵²⁷ Sukhānanda's commentary on Lolimbarāja's *Vaidyaḥjivana*, Trivikrama's *Lauhapradīpa*,¹⁵²⁸ Vaidyarāja's *Sukhabodha*, and the *Yogaratanākara*.¹⁵²⁹

Vaṅgasena's treatise was one of the sources of Āryadāsa Kumārasīṃha's *Kvā-thamanimālā*, Viśvanātha Dvivedī's *Rasendrasambhava* and of the *Ma'din al-Šhifā'*. It was (anonymously) used as a source by the author of the interpolated portion of Niścalakara's *Ratnaprabhā*.¹⁵³⁰

Commentaries on Vaṅgasena's work may have been written by Vaidyanātha¹⁵³¹ and Trivikrama.¹⁵³²

*Special features*¹⁵³³

Vaṅgasena deviates from the *Mādhavanidāna* by inserting stanzas from other sources, splitting up chapters, combining them in new ways, and adding new diseases. Insertions occur especially in the chapters on jvara, netraroga, strīroga, and bālaroga. Vaṅgasena has separate chapters on rājayakṣman and kṣatakṣaya,¹⁵³⁴ hikkā and śvāsa,¹⁵³⁵ śūla and pariṇāmasūla,¹⁵³⁶ udāvarta and ānāha,¹⁵³⁷ galagaṇḍa, gaṇḍamālā, granthi, and arbuda.¹⁵³⁸ Mādhava's gynaecological chapters are replaced by one chapter on strī-roga.

A noteworthy feature is the addition of chapters on bhasmaka, bradhna, and snā-yuka, diseases that are not separately dealt with in Vṛnda's *Siddhayoga* and the *Cakra-datta*. Vaṅgasena describes the pathogenesis, symptoms and therapy of bhasmaka, a disorder characterized by an excessive activity of the digestive fire.¹⁵³⁹ Bradhna is described together with kuraṇḍa, two disorders with swelling of the inguinal canal and the scrotum as their chief symptom. The verse on bradhna is identical with that on vardhma in Vṛnda's *Siddhayoga* (40.20); kuraṇḍa, said to differ from bradhna in being painless, is added from an unknown source. The treatment of bradhna is the same as that of Vṛnda's vardhma, apart from one extra recipe.¹⁵⁴⁰ Formulae against kuraṇḍa are absent. The characterization of snāyuka is a somewhat expanded version of the description found in the *Siddhayoga* (55.15–17); its treatment, partly the same as in the *Siddhayoga*, is more elaborate.

The description of the disease called urograha, a very painful swelling of the upper and lateral parts of the abdomen, may be the earliest one, unless this disorder was already known to Vāgbhaṭa;¹⁵⁴¹ Vaṅgasena also deals with its treatment.

Worthy of attention is Vaṅgasena's enumeration of the symptoms of five types of splenomegalia (plīhodara; udara 121–127).

The chapter on masūrikā adds a verse (33) on a variety called kodrava or kakṣāka, originating from kapha and vāta.

Somaroga (strīroga 82–85) and the related mūtrātisāra (strīroga 90) are two disorders recognized for the first time in Vaṅgasena's work, in the chapter on women's

diseases. Somaroga is a polyuria, occurring in women only; when of long standing, it is called mūtrātisāra.¹⁵⁴²

Aversion to sexual intercourse in women (strīvidveṣa or strīdoṣa) is also dealt with in the chapter on women's diseases (prose between 90 and 91); the passages on this group of disorders are quoted from the strīdoṣacikitsāpariccheda of Nāgārjuna's *Yogasāra*. Three types are distinguished, caused respectively by fate (daiva; for example, incompatible horoscopes of husband and wife), an awkward (avidagdha) husband, and a female rival (sapatnī).¹⁵⁴³ Rituals, sometimes accompanied by the application of drugs, are thought to be helpful in overcoming the woman's resistance; statuettes (puttalikā), made of particular substances, homage paid to the Kumārīs, and mantras, are important elements of the rituals described.

Two interesting children's diseases mentioned are paścātaka (bālaroga 114–119), a vṛaṇa (sore or ulcer) affecting the anal region, probably also known as vicchi, vicchī and vicchinna¹⁵⁴⁴ (bālaroga 120–122), and śayyāmūtraṇa (bālaroga 126–128), enuresis nocturna.¹⁵⁴⁵ The description of the children's disease called upaśīrṣaka, omitted in the *Mādhavanidāna*, is borrowed by Vaṅgasena (bālaroga 129) from Vāgbhaṭa.¹⁵⁴⁶ The bad effects of the inauspicious, too early eruption of teeth are dealt with in a series of verses (bālaroga 140–144), followed by the prāyaścitta required in such cases (bālaroga 146–148).

The rāsāyana chapter contains a number of recipes which are specifics against particular diseases (262–318). The same chapter describes the marmans (prose between 331 and 332, 332–350) and enumerates the nānātmaja disorders by vāta, pitta and kapha (351–369).

The chapter on ariṣṭas has verses on the examination of a patient's eyes (netraparīkṣā 178–186), face (mukhaparīkṣā; 187–188), and tongue (jihvāparīkṣā; 189–192), followed by an elaborate description of the examination of the urine (mūtraparīkṣā; 193–225), which includes, for the first time in Indian medical history, the tailabindu method, in which the form, assumed by a drop of oil on the surface of the urine, has diagnostic and prognostic significance.¹⁵⁴⁷

Vaṅgasena's materia medica is mostly of the common āyurvedic type. He is, however, one of the earliest authors to prescribe *Cannabis sativa* Linn. (bhaṅgā; rājayaḥṣman 83).¹⁵⁴⁸ Opium is still unknown to him.¹⁵⁴⁹

The stage of development of rasasāstra in Vaṅgasena's work deserves careful study, having been underestimated previously by J. Jolly,¹⁵⁵⁰ who claimed that the calcination of metals is not mentioned, while metals in general are only infrequently spoken of, though iron is elaborately described, as well as its killing (māraṇa), etc.

Iron and its varieties are indeed described in a detailed way in the chapter on haemorrhoids (arśas 214–241).¹⁵⁵¹ The usual three types of iron are listed: muṇḍa, tīkṣṇa and kānta; muṇḍa has three varieties: mṛḍu, kuṇḍa and kaṇḍāra, tīkṣṇa is of six varieties: khara, yogara, sāra, karṇaka, drāvaka and romaka, kānta is divided into seven varieties: huntāla, tāra, vaṭṭa, vājara, kāla, bhrāmaka and cumbaka (arśas 214–225); besides the already mentioned types, pāṇḍija loha is referred to (arśas 229 and 266).

Various other metals are mentioned in the treatise: copper (tāmra) occurs at many places in the chapter on rasāyana (53, 69, 101, 110, 115), lead (nāga) and tin (vaṅga)

are referred to in the same chapter (95). Substances like sulphur (gandhaka), mica (abhraka), etc., are repeatedly prescribed. The killing (māraṇa) of diverse metals, not only iron, was well known to Vaṅgasena (rasāyana 77 and 95). He was also acquainted with a number of processes to which mercury should be subjected before using it medicinally (rasāyana 264 and 287: mūrchanā; 461: śodhana).

Remarkable is the occurrence of the terms yaśada (zinc; rasāyana 326)¹⁵⁵² and śā-nkhadrāva (udara 176–178) in the relatively early work of Vaṅgasena.¹⁵⁵³

Rasayogas are not uncommon among Vaṅgasena's formulae.¹⁵⁵⁴ Elements derived from religion¹⁵⁵⁵ and astrology¹⁵⁵⁶ are repeatedly found in the verses on treatment; mantras are regularly employed; two yantras are described.¹⁵⁵⁷ Tantric practices are referred to.¹⁵⁵⁸

The names of the days of the week are known to Vaṅgasena.¹⁵⁵⁹

The author

Vaṅgasena gives information about himself at the beginning and end of his work. Śiva, Caṇḍī and Sarasvatī are praised in the opening lines, which also provide us with the author's and his father's name, adding that Gadādhara, Vaṅgasena's father, was born in Kāntikā.¹⁵⁶⁰ The vaṅgasenotpatti at the end of Vaṅgasena's treatise opens as follows: "When Śrīkṛṣṇa, who had freed the earth of diseases, had left and had returned to his abode, it became filled with diseases and frightening again in a short time. On seeing this, I was born in the house of Gadādhara¹⁵⁶¹ and made the earth healthy again". It ends with the words: "After being born in the house of Gadādhara, I redacted the work that was called *Agastisaṃhitā*¹⁵⁶² before my birth. Thereafter it became well known under the name of *Vaṅgasena*. This book, being the quintessence of all the doctrines, will speedily confer success".

The identity of Vaṅgasena's father with one of the persons called Gadādhara who are known from Sanskrit medical literature is a matter of speculation, for information on his literary activity is entirely lacking. It is improbable, on chronological grounds, that Gadādhara, the father of Vaṅgasena, wrote the commentary on the *Suśrutasaṃhitā* or the *Vaidyaprasāraṇa*, but Vaṅgasena's probable date does at least not conflict with identifying his father with Vaidyagadādhara or Gadādhara-vaidya, quoted in Śrī-dharadāsa's *Saduktikarṇāmaṇṭa*, compiled in 1205.¹⁵⁶³

It is commonly assumed that Gadādhara and Vaṅgasena were of Bengal origin.¹⁵⁶⁴

Gadādhara's birthplace has been identified as Kāñjivillī in Rāḍha (Western Bengal)¹⁵⁶⁵ and Kāntinagara of the Muzaffarpur district in Bengal.¹⁵⁶⁶

Apart from the *Cikitsāsārasaṃgraha*, no other works by Vaṅgasena are known.¹⁵⁶⁷

Date

It has long been known that Vaṅgasena cannot be dated later than the first half of the thirteenth century, on account of the dates of some early MSS.¹⁵⁶⁸ J. Jolly claimed that he might have been a contemporary of king Lakṣmaṇasena of the Sena dynasty.¹⁵⁶⁹ P.K. Gode considered him to have lived in the twelfth century at the latest, basing this view on quotations from Vaṅgasena in Hemādri's commentary on the *Aṣṭāṅghaṛdayasaṃhitā*.¹⁵⁷⁰ As Hemādri lived in the second half of the thirteenth

century and P.K. Gode assumed a rather long interval of seventy-five years between the two, his conclusion was rejected by N.N. Das Gupta¹⁵⁷¹ and H.V. Trivedi,¹⁵⁷² who placed Vaṅgasena in the thirteenth century. D. Ch. Bhattacharyya discovered later that the *Vaṅgasenasamgraha* is quoted by Niścalakara,¹⁵⁷³ which lowers the date to the period before A.D. 1150–1200.¹⁵⁷⁴ Vaṅgasena is assigned to the period 950–1050 by Rām Kumār Rāy and Rājīv Kumār Rāy.¹⁵⁷⁵

Evidence concerning Vaṅgasena's chronological position is, as appears from the foregoing, of diverse kinds. Apart from the early MSS, which remain valuable testimonies, it derives from the text of his treatise and quotations from it in later treatises. The contents of the *Cikitsāsārasamgraha* show that Vaṅgasena was posterior to Mādhava, the author of the *Rugviniścaya*, which work he largely utilized, and Vṇḍa, from whose *Siddhayaoga* he borrowed. The common assumption that Vaṅgasena took many recipes from Cakrapāṇidatta's *Cikitsāsamgraha*,¹⁵⁷⁶ although still to be tested, appears to be acceptable.¹⁵⁷⁷

The sources specified by Vaṅgasena are of no avail in fixing his date. The rather developed state of rasaśāstra prohibits placing Vaṅgasena earlier than Cakrapāṇidatta, while the absence of the examination of the pulse as a diagnostic tool forces us to regard him as earlier than Śārngadhara.

A particular piece of internal evidence, namely the attribution of a formula to Śrī- viśvarūpa,¹⁵⁷⁸ led P.V. Sharma to date Vaṅgasena in the reign of king Viśvarūpasena of the Sena dynasty, who acceded to the throne in A.D. 1205¹⁵⁷⁹ or 1206.¹⁵⁸⁰ This view is, however, contradicted by the early date of some quotations from Vaṅgasena,¹⁵⁸¹ which are of considerable value in determining Vaṅgasena's terminus ante quem. Those found in Hemādri point to a date earlier than the second half of the thirteenth century; the single quotation in Ḍalhaṇa's commentary on the *Suśrutasaṃhitā* lowers the limit to about A.D. 1200, and, finally, the quotation in Niścalakara's *Ratnaprabhā* enables to conclude that Vaṅgasena lived in the period A.D. 1050–1100.¹⁵⁸²

Vatseśvara

Vatseśvara wrote the *Cikitsāsāgara*,¹⁵⁸³ a compilation, which refers to the *Agnipurāṇa*, *Garuḍapurāṇa*, and *Suśruta* as sources. At the beginning of the work the author gives his genealogy: he was the son of Deveśvara, son of Horeśvara, son of Bhūḍharadatta, the younger brother of Vīreśvara, and, like the latter, a son of Devāditya. Vatseśvara held, like the members of his family mentioned by him, the position of a minister at a royal court.¹⁵⁸⁴

Vīreśvara's son Caṇḍeśvara, Vatseśvara's great-uncle, was a well-known dharmasāstrin, who served king Harasimphadeva of Mithilā, and who, in A.D. 1314, gave away his weight in gold on the banks of the river Vāgvatī (the modern Bagmati) in Nepal.¹⁵⁸⁵

Being of the generation of Caṇḍeśvara's grandchildren, Vatseśvara flourished about A.D. 1360.¹⁵⁸⁶

Vīrasīṃha

The *Vīrasīṃhāvaloka*¹⁵⁸⁷ by Vīrasīṃha is a treatise which describes the aetiology and therapy of each group of diseases in three entirely different ways, according to the principles of astrology,¹⁵⁸⁸ karmavipāka, and medicine.

Contents

The work is written in a mixture of verse and prose, the latter being chiefly found in the parts dealing with astrology and karmavipāka. After two introductory verses and some introductory prose, the author gives a list of the diseases that will be dealt with. Their order agrees with the *Mādhavanidāna*, apart from the following alterations and additions. A chapter on jvarātisāra has been added after that on jvara, one on mahonmāda after that on pānātyaya,¹⁵⁸⁹ and one on vardhma after that on antravṛṣa-ṇamuṣkaroga.¹⁵⁹⁰ The chapter on kṣudrarogas is divided into two parts, the first of which is concerned with a short series of these disorders and their treatment, along the lines of books on karmavipāka: valmīka, jvālāgardabha,¹⁵⁹¹ pāṣāṇagardabha, carmakīla or kīlakavraṇa, vaikṛtyaroga¹⁵⁹² and aviññātaroga.¹⁵⁹³ The second part is about the medical treatment of thirty-four kṣudrarogas. The chapter on yonivyāpad is followed by one on garbharakṣā, describing the measures to be taken during the ten months of pregnancy, and the treatment of disorders of lactation. The chapter on strīroga is concerned with stanaspṛṣṭa,¹⁵⁹⁴ mūḍhagarbha and yonikanda. Chapters on bālaroga and viṣa end that part of the treatise which is arranged in agreement with the *Mādhavanidāna*.

Eleven more chapters follow, not listed in the table of contents at the beginning of the work; they are about rasāyana, vājīkaraṇa, sneha, sveda, vamaṇa, vireka, anuvā-sana, nirūha, dhūma, nasya, and kavala. The treatise ends with a miśra chapter, enumerating the best medicine in each disorder and describing weights and measures. At the end the author gives some information about himself.

The composition of the *Vīrasīṃhāvaloka* is somewhat uneven. Its sections on astrology and karmavipāka precede those devoted to medicine in its strict sense, and appear to be regarded as more important than the latter.¹⁵⁹⁵ Therapy was a greater concern of the author than nidāna. His chief source regarding therapy was Vṛnda's *Siddhayoga*, while most verses on nidāna were taken from Mādhava's *Rugviniścaya*, though these are sometimes interspersed with verses of unknown origin.¹⁵⁹⁶

Vīrasīṃha specifies his sources in many instances. The following works and authors are quoted or referred to: *Ārogyacintāmaṇi* (47),¹⁵⁹⁷ *Bārhaspatya* (189), Baudhāyana (many times), Bheda (128), *Brahmagitā* (36),¹⁵⁹⁸ *Brahmāṇḍapurāṇa* (65, 101, 119, 163, 238, 260, 262, 294), *Brahmapurāṇa* (239), Caraka (17, 74, 110, 162, 294), *Cikitsākalikā*¹⁵⁹⁹ (72),¹⁶⁰⁰ *Dāmodara* (47), Gārgya (4), *Garuḍapurāṇa* (59), Gautama (32, 210), *Gautamīya* (256), Hārīta (2, 75), *Jātaka* (many times), *Kalikā*¹⁶⁰¹ (26),¹⁶⁰² 38, ¹⁶⁰³ 72, 111),¹⁶⁰⁴ *Kalyāṇakāraka* (117), Kātyāyana (238), *Kūrmapurāṇa* (260), *Liṅgapurāṇa* (221), *Mahābhārata* (66, 78, 119, 219), *Mahādevabhāṣya* (277), *Maheśvaratantra* (4),¹⁶⁰⁵ *Mānava* (189), *Nāradyapurāṇa* (273), *Nāradyavacana* (190), *Padmapurāṇa* (27, 32, 36, 64, 94, 152, 174, 201, 261), *Pitāmahasamhitā* (279),

Ṛgvidhāna (43, 238), *Rugviniścaya* (many times), *Śaṃkaragītāḥ* (119), *Sārāvalī* (2, 27, 31), *Śātātapiya Karmavipākā* (91), *Śaunaka* (51–53), *Śivagītā* (32), *Śrīpati* (27, 32, 36, 58, 91, 289), *Suśruta* (6, 42, 60, 69, 84, 86, 93, 95, 97, 102, 164, 253, 256, 274), *Trīṣaṭhācārya* (7–9),¹⁶⁰⁶ *Umāmaheśvarasaṇvāda* (77, 101, 118), *Vācaspati* (118),¹⁶⁰⁷ *Vāgbhaṭa* (21, 23, 35), *Vārāha* (209), *Vāyupurāṇa* (79, 119, 158, 166, 217, 273, 278), *Viṣṇu* (184, 239), *Vṛddhabaudhāyana* (179–210), *Vṛddhagautama* (53, 166), *Vṛddhaparāśara* (43), *Vṛndasaṇgraha* (many times), and *Yogarātnāvalī* (48).¹⁶⁰⁸

The *Vīrasīṃhāvaloka* is quoted by Devasiṃha Viṭṭhal in his *Bṛhadāsavārīṣṭasaṇgraha*, Karandīkar in his *Nidānadīpikā*,¹⁶⁰⁹ Meghamuni in his *Meghavinoda*,¹⁶¹⁰ Trimalla in his *Yogatarāṅgiṇī*, and in the *Yogarātnākara*; it was probably used by Śārṅgadhara in the composition of his *Trīṣaṭī*.

Special features

Unusual names of diseases mentioned in this work are mahonmāda (100–101), vaikṛtyaroga (239), avijñātaroga (239), and stanasphoṭa (288–289). Thirty-four kṣudrarogas are mentioned (239–244), whereas their number is thirty-six in the works ascribed to Vāgbhaṭa, forty-four in the *Suśrutasaṇhitā* and *Mādhavanidāna*.

The author

At the end of the work the author, who calls himself a lion among the kings, mentions that his name is Vīrasīṃha and that he is of Tomara lineage. His father was Devavarman and his grandfather Kamalasiṃha.

The Tomaras were a Rājput clan who founded a dynasty in Gwalior in 1375.¹⁶¹¹

Vīrasīṃha dictated his treatise to a kāyastha named Sāraṅga.¹⁶¹²

Two more works by an author called Vīrasīṃha are an *Āyurveda*¹⁶¹³ and the *Nṛ-simhodaya*.¹⁶¹⁴

The author of the *Vīrasīṃhāvaloka* is sometimes credited with the *Durgābhaktitarāṅgiṇī*.¹⁶¹⁵

Date

The *Vīrasīṃhāvaloka* was completed in A.D. 1383.¹⁶¹⁶

Viśvanātha

Viśvanātha was the author of the *Pathyāpathyaviniścaya*¹⁶¹⁷ or *-vinirṇaya*¹⁶¹⁸ and the *Cikitsārṇava*.¹⁶¹⁹

(1) *Pathyāpathyaviniścaya*.¹⁶²⁰

After a maṅgala addressed to Śiva and some stanzas which introduce its subject, this treatise, consisting of 611 verses, enumerates which substances are beneficial or harmful in a series of diseases (9–556) and in the six seasons (557–583). Towards the end, after some verses on basic principles of therapy, it mentions the disorders dealt with in the work (587–594). An appendix (parīṣiṣṭa) is concerned with the actions of the

tastes and the effects of overindulgence in substances with a particular taste (595–607); it concludes with some general verses (608–610). The book ends with information on the author (611).

Mādhava's arrangement of the diseases is for the greater part adopted. The remedial measures and medicinal substances mentioned by Viśvanātha are almost completely of a classical āyurvedic type. Musk is known to him.¹⁶²¹ Opium is not prescribed. Cannabis may form part of Viśvanātha's materia medica.¹⁶²²

The verses on jvara mention taruṇa- (9 and 12–13), madhyama- (14–16), and purāṇajvara (31–34); those on atisāra refer to jvarātisāra (58–59). Homage to Śiva is recommended in insanity caused by devas, etc. (232). The disorders called bradhma and vṛddhi are mentioned together (373–377). Remedial measures of a religious nature are not referred to in the verses on masūrikā (459–464). The verses on gynaecology and obstetrics are arranged around the following subjects: pradara and yonivyāpad (495–407), pregnancy (498–507), and puerperal diseases (sūtikārōga, 508–517). Viśarōga is followed by verses on mixtures of diseases (rogasamkara, 531–532), vātarōga (533–543), pittarōga (544–550), and kapharōga (551–556). Surgical measures, especially cautery (dāha)¹⁶²³ and venesection,¹⁶²⁴ are frequently recommended. The tailadroni is twice referred to.

Worthy of notice are the following words: pacelima (16; 180); roṭikā (a kind of bread; 24); names of plants like kañcaṭa (68; 120), methī (94), and peṭī (191; 214; 239; 253); names of fishes such as bhākura (536), ceṅga (172), ḍiṇḍiśa (51), gargara (249; 536), illiśa (172; 249), kavayī (172; 249), khaliśa (68), khuḍḍiśa (68; 250), madhurālikā (51; 68; 172), parvata (249), proṣṭī (172), rohita (250), śilīndhra (249), śṛṅgin (250), toḍimatsya (48), varmī (250), and the word for shrimp, ciṅgaṭa (118).

Geographical names found in the work are Mahendragiri (363), Pāriyātra (389), and Sahyādri (436).

(2) No details are available on Viśvanātha's second work, the *Cikitsāṇava*.¹⁶²⁵

The author

Viśvanātha¹⁶²⁶ mentions at the end of his *Pathyāpathyavinīścaya* (611) that he was a great-grandson of Umāpati, grandson of Tapanā,¹⁶²⁷ who was a leading poet and physician, and son of Gaurīnaraṣiṃhasena.¹⁶²⁸

Date

Viśvanātha is said to have written his *Pathyāpatha* at the court of Pratāparudra, the Gajapati king of Orissa¹⁶²⁹ (A.D. 1497–1540),¹⁶³⁰ who was a contemporary and disciple of Caitanya (A.D. 1486–1533), one of the mediaeval Vaiṣṇava saints of India.¹⁶³¹

The *Mahārṇava* or *Madanamahārṇava* compiled by Viśveśvarabhaṭṭa

The *Mahārṇava* or *Madanamahārṇava*,¹⁶³² attributed to Mādhātā, ¹⁶³³ son of Madanapāla, ¹⁶³⁴ was actually compiled by Viśveśvarabhaṭṭa.¹⁶³⁵

Contents

This large treatise, in a mixture of verse and prose, arranged in forty chapters (taraṅga),¹⁶³⁶ is a compilation¹⁶³⁷ which deals exclusively with karmavipāka, the retribution of acts committed in former existences, a subject that belongs rather to dharmaśāstra than to medicine,¹⁶³⁸ although it is sometimes dealt with in medical treatises. Remedial actions of a religious nature (prāyaścitta, dāna, homa, bali, stotra, mantra, etc.) against a long series of diseases are described in that context (chapters eight to forty).¹⁶³⁹

Illness is divided into three types: arising from karman, from the doṣas, and from the combined actions of these two.¹⁶⁴⁰ Diseases arising from bad karman are of three types again: resulting from mahāpātaka or mahāpāpa, upapāpa, and pāpa, lasting respectively during seven, five and three successive births; mahāpāpa gives rise to kuṣṭha, rājayakṣman, prameha, grahaṇī, mūtrakṛcchra, āsmarī, kāsa, atisāra, bhagandara, duṣṭavraṇa, gaṇḍamālā, pakṣaghāta, and akṣināśana, upapāpa to jalodara, yakṛt, plīhan, śūla, śopha, vraṇa, śvāsa, ajīrṇa, jvara, chardi, bhrama, moha, galagraha, raktārbuda, and visarpa, pāpa to valmīka, puṇḍarīka, etc.¹⁶⁴¹

The *Mahārṇava* is quoted by Allāḍanātha,¹⁶⁴² Raghunandana in his *Kṛtyatatva*,¹⁶⁴³ Śrīnātha, and others.¹⁶⁴⁴

Special features

Several varieties of śūla (chapter nine), vraṇa (chapter fifteen) and sphoṭa (chapter fifteen) are mentioned; the term gunma is used instead of gulma (chapter twenty-seven); lūtakitva (chapter thirty-six) may designate a disorder related to lūtāvraṇa; unusual types of kuṣṭha are referred to (chapter thirty-seven): hīna-, rakta-, pīta-, gunma-, kṣṣṇa-, kati-, netra-, and śvetakuṣṭha; ākasmikakārśya is mentioned (chapter thirty-nine); many grahas are enumerated which are for the greater part not met with elsewhere (chapter forty): prajā-, jvara-, pratuṇḍa-, kāmila-, kālanāyaka-, pitṛ-, lokāyata-, āpastamba-, vṛtra-, mahājvara-, kumbhaka- or jambhaka-, kapila-, śivapāda-, ūrdhvakeśi-, viṣṭambha- or vivṛtākṣa-, mahājihvā-, nava-, vāsava- or vāyasa-, kṣetrapāla-, acala-, hastipāda-, karṇa-, dhana-, avatola-, kṛśa- or śaśi-, skanda-, skandāspasmāra-, śiśu-, and meṣagraha.

The author

Viśveśvara, of Kauśikagotra, was the son of Pedibhaṭṭa¹⁶⁴⁵ and Ambikā, and a pupil of Vyāsāranyamuni. Originating from Southern India, as appears from his father's name, he migrated to Northern India in search of patronage. Viśveśvara won the admiration of the Redḍi kings and was the poet laureate of the Recarla king Siṅgabhūpāla (A.D. 1386–1412), according to P. Hymavathi.¹⁶⁴⁶ He is regarded as one of the leading authorities of the Benares school of modern Hindu Law.¹⁶⁴⁷

Date

The *Mahārṇava* probably dates from 1360–1390, i.e., the period of Viśveśvarabhaṭṭa's literary activity.¹⁶⁴⁸

Vopadeva

Vopadeva¹⁶⁴⁹ was the author of at least three medical works: ¹⁶⁵⁰ (1) *Siddhamantraprakāśa*,¹⁶⁵¹ a commentary on his father's *Siddhamantra*; (2) *Hṛdayadīpikā*,¹⁶⁵² a nighaṇṭu; (3) *Śataśloṭī*,¹⁶⁵³ a collection of recipes accompanied by an auto-commentary, the *Candrakalā*.¹⁶⁵⁴

A commentary on the *Śāringadharasaṃhitā*, called *Gūḍhārthadīpikā*, commonly ascribed to Vopadeva¹⁶⁵⁵ on the authority of Weber¹⁶⁵⁶ and Aufrecht,¹⁶⁵⁷ is not his work, for its text, as recorded by Weber, is identical with Kāśīrāma's *Gūḍhārthadīpikā* on the *Śāringadharasaṃhitā*.¹⁶⁵⁸

Vopadeva was a prolific author, who also produced treatises on grammar (*Kavikalpadruma* with an auto-commentary called *Kāvya-kāmadhenu*; *Mugdha-bodha*), on dharmaśāstra (*Triṃśacchloṭī*; *Paraśurāmapratāpīkā*), and on the *Bhāgavatapurāṇa* (*Harilīlā*, an abstract of this *Purāṇa*; *Muktāphala*, a summary of its teaching), etc.¹⁶⁵⁹ His versatility is revealed by a verse at the end of the *Muktāphala*, in which he claims to have composed ten works on grammar, nine on medicine, one on tithinirdhāra (i.e., jyotiṣa), three on sāhitya, and three on the *Bhāgavatapurāṇa*.¹⁶⁶⁰ Even the *Bhāgavatapurāṇa* itself has been attributed to Vopadeva.¹⁶⁶¹

(1) The *Siddhamantraprakāśa* is an elaborate and valuable commentary.¹⁶⁶² Its exposition on the terms *rasa*, *vipāka*, *vīrya*, and *prabhāva*¹⁶⁶³ is theoretically important, amongst other things on account of the view that the effect of *prabhāva* is not due to natural factors inherent in a medicinal substance (*svābhāvika-bala*), but to an extra, especially conditioned factor (*aupādhika-bala*). Noteworthy is also the digression on the term *udāsīna*¹⁶⁶⁴ (i.e., neutral with respect to the *doṣas*), used by Keśava in order to harmonize mutually conflicting statements of Caraka, Suśruta, and Khāraṇādi. Vopadeva declares that only the works of Caraka, Suśruta, and Vāgbhaṭa can be accepted as authoritative, due to their completeness, the continuity of their tradition, and the scholarly commentaries available.¹⁶⁶⁵ The identity of plants, animals, etc., enumerated by Keśava, is elucidated by his son by means of synonyms and, rather frequently, by vivid descriptions based on morphological and other characteristics,¹⁶⁶⁶ which enhances the value of this remarkable work.

Though many earlier treatises consulted by Vopadeva are quoted by name, it remains difficult to assess who were his foremost authorities. P.V. Sharma demonstrated that Ḍalhaṇa's *Nibandhasaṃgraha* comes first, followed by the *Aṣṭāṅganighaṇṭu* and Cakrapāṇidatta's *Āyurvedadīpikā*.¹⁶⁶⁷

Vopadeva quotes the commentaries of Hariścandra and Jejjāṭa. Other authorities and works cited are: Amara, Asaṃkara,¹⁶⁶⁸ Bāṣpacandra, Hārīta,¹⁶⁶⁹ Khāraṇādi, Mādhava,¹⁶⁷⁰ Nala,¹⁶⁷¹ Rāghava, and Rudrabhaṭṭa or Rudraṭa,¹⁶⁷² as well as a *Kārttikeyapurāṇa* and a *sūdasāstra*.¹⁶⁷³

The *Siddhamantraprakāśa* is quoted in Priyavrat Śarmā's auto-commentary on the *Dravyaguṇasūtra* and Śivadatta's auto-commentary on the *Śivakoṣa*.¹⁶⁷⁴

(2) The *Hṛdayadīpaka*, called a nighaṇṭu by the author himself,¹⁶⁷⁵ was written in order to clarify the medicinal substances occurring in *Svalpavāgbhaṭa*¹⁶⁷⁶ and other works,¹⁶⁷⁷ which calls to mind Vāgbhaṭa's prominent position as an authority for Vopadeva.

The work consists of 176 verses in a variety of metres (the anuṣṭubh predominating), arranged in eight vargas, and presents mostly names of drugs. The arrangement of the subject matter resembles that of the *Paryāyaratnamālā*.

Vargas one to four treat of substances the synonyms of which can be arranged in four (catuṣpādavarga), three (tripādavarga), two pādas (dvipādavarga) or one pāda (ekapādavarga); vargas five and six enumerate drugs with two names (dvināmavarga) or one name (ekanāmavarga); varga seven (nānārthavarga) forms the homonymic section; varga eight (miśrakavarga), of a heterogeneous character, is concerned with articles of diet, medicinal preparations, nosological terms, pañcakarman, paribhāṣā, etc.

Vopadeva's descriptions are sometimes similar to those of the *Amarakoṣa*.¹⁶⁷⁸ Some of Vopadeva's drugs are absent from the *Bṛhatrayī*, e.g., asthisamhāra (75), babbūla (128), hijjala (127), and jalakanda (111).

The *Hṛdayadīpaka* is quoted by Raghunātha in his *Bhojanakutūhala* and Śivadatta in the auto-commentary on his *Śivakoṣa*.¹⁶⁷⁹

A supplement to the *Hṛdayadīpaka*, called *Paripūrti*, was written by Nāganātha.¹⁶⁸⁰

(3) The *Śataślokī* counts 101 verses in various long metres. Apart from the introductory and closing lines there are ninety-six stanzas describing well-known formulae, which are divided into six adhikāras of sixteen verses each, devoted to six types of preparation, namely cūrṇa, guṭikā, leha, ghṛta, taila, and kvātha.

The *Śataślokī* is provided with a commentary by Vopadeva himself, called *Candrakalā*, as indicated by the author at the end of his work.¹⁶⁸¹ This commentary gives synonyms of the substances going into a compound medicine and specifications about the way to prepare it. Another commentary, written by Veṇīdatta, son of Bhogin, grandson of Vāsudeva, is called *Bhāvārthadīpikā*.¹⁶⁸² A Hindī commentary (stabaka) on the *Śataślokī* was composed in Pālī in Mārvāt, in 1774/75, by Rāmaviṣṇu Upādhyāya, pupil of Dayāsiṃha of the Kharataragaccha.¹⁶⁸³ Another Jain monk, Cainsukha of the Kharataragaccha, pupil of Lābhanidhāna, wrote, in A.D. 1763/64, a commentary on it in Rājasthānī.¹⁶⁸⁴

Vopadeva's *Candrakalā* is referred to by Śivadāsaśena in his commentary on the *Cakradatta*.¹⁶⁸⁵ The *Śataślokī* is quoted by Kāśīrāma in his commentary on the *Śārṅgadharaśaṃhitā*¹⁶⁸⁶ and in the *Yogaratanākara*.¹⁶⁸⁷ Vopadeva is referred to in Śailendrasīṃha's *Vaidyacentāmaṇibhaiṣajyasamgraha*.¹⁶⁸⁸ Unspecified works of Vopadeva are quoted in Hārṇacandra's commentary on the *Suśrutasaṃhitā*, Kāśīrāma's commentary on the *Śārṅgadharaśaṃhitā*,¹⁶⁸⁹ Narahari's *Vāgbhaṭamañḍana*,¹⁶⁹⁰ and the *Tāmbūlamāñjarī*.

The author

Vopadeva was the son of Keśava and the pupil of Dhaneśa;¹⁶⁹¹ he lived, as his father did, in Vedapada.¹⁶⁹² He was a paṇḍit to the Yādava king Mahādeva (1260–1271) and a friend of Hemādri.¹⁶⁹³ The close association between Vopadeva and Hemādri is attested by the latter's commentaries on Vopadeva's *Muktāphala* and *Harilīlā*.¹⁶⁹⁴ Vopadeva wrote his *Harilīlā* and *Muktāphala* at the request of Hemādri¹⁶⁹⁵ and may also have composed a biography of the latter in the last phase of his life.¹⁶⁹⁶ Hemādri shared Vopadeva's predilection for Vāgbhaṭa and was the author of a commentary on the *Aṣṭāṅgahṛdayasaṃhitā*.

Date

Vopadeva's association with the court of Mahādeva proves that he lived in the second half of the thirteenth century.¹⁶⁹⁷

Part 8

Authors and works from the 16th
to the 20th centuries

Chapter 1

Sixteenth-century authors and works

Ānandabhāratī Yatīndra

Ānandabhāratī Yatīndra, also called Ānanda(bhāratī)siddha and Yogasiddha, pupil of Nṛsiṃhabhāratī, was the author of a work known as *Ānandamālā*(*rasasāra*) or *Ānandamālikā*; this work is also referred to under the titles *Vaidyakaśārasaṃgraha*, *Yogajñāna*, *Yogamālā*, and *Yogaśāstra*.¹

The full extent of this treatise is not known and the order of the chapters varies in the MSS. Subjects dealt with in one of the MSS² are: kvātha, rasa, cūrṇa, guṭikā, pralepa, avaleha, āsava, ghr̥ta, taila, añjana, dhātuśodhanamāraṇa, virecana, and nakṣatrarogagaṇanā. Another MS,³ described as chiefly concerned with rasayogas, takes into consideration other types of medicines too.⁴

Caraka, Suśruta and the *Rasaratnākara* are referred to.⁵

The *Ānandamālā* is quoted in Ananta's *Pratāpakalpadruma*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, and an anonymous *Pākārṇava*.

The author and his date

Ānandabhāratī's name informs us that he was a monk of the Daśanāmī order.⁶ Both Ānandabhāratī and his teacher Nṛsiṃhabhāratī are called paramahaṃsaparivrājakācārya.⁷

The period in which Ānandabhāratī lived is elucidated by the references to the *Rasaratnākara*, dating from the first half of the fifteenth century, and the date of one of the BORI MSS of the *Ānandamālā*, A.D. 1660.⁸ Nṛsiṃhabhāratī, the guru of Ānandabhāratī, has tentatively been identified by P.K. Gode⁹ as the person of that name who was also the preceptor of Durvāsabhāratī¹⁰ and Viśvarūpabhāratī.¹¹ Nṛsiṃhabhāratī can be assigned to the period 1475–1550, which establishes that Ānandabhāratī must have written his work in the earlier part of the sixteenth century.

Bhāvamiśra

Bhāvamiśra¹² was the author of (1) the *Bhāvaprakāśa*, (2) the *Guṇaratnamālā*, and (3) a commentary on the *Mādhavanidāna*.¹³

The Bhāvaprakāśa

(1) The *Bhāvaprakāśa*^{14,15} is a voluminous compilation of an encyclopaedic character that belongs to the smaller authoritative triad called *Laghutrayī*.¹⁶ It consists of three

khaṇḍas and a nighaṇṭu. The first khaṇḍa is divided into a first part (1,157 verses) which has six prakaraṇas, the nighaṇṭu (2,062 verses), and a second part (1,025 verses) that forms the seventh prakaraṇa.

Prakaraṇa one contains Bhāvamiśra's version of the descent of āyurveda, a version that differs in some respects from its parallels in the *Caraka-* and *Suśrutasaṃhitā*. It is not Bharadvāja who goes first to the abode of Indra and receives the āyurveda, but Ātreya, followed later by Bharadvāja;¹⁷ Caraka figures in the story as an incarnation of Śeṣa,¹⁸ born on earth in order to free mankind from diseases; his saṃhitā is said to be based on the works of the six disciples of Ātreya. Dhanvantari also receives the āyurveda from Indra and is, on the latter's request, born as Divodāsa, king of Kāśī; Viśvāmitra and other sages, recognizing Divodāsa as an incarnation of Dhanvantari, send their sons to him for instruction; after completing their studies, these sons return home; Suśruta, the son of Viśvāmitra, is the first among them to write a tantra.

Prakaraṇa two is a condensed version of the Sāṃkhya philosophy in its classical form. Prakaraṇa three is concerned with embryology and anatomy; the doṣas, dhātus, marmans, etc., are also dealt with. Prakaraṇa four is about the care for a newborn child and about the constitutions. Prakaraṇa five forms a long and detailed description of svasthavṛtta (dinacaryā, rātricaryā, rtucaryā). Prakaraṇa six (miśraprakaraṇa) deals, as its name suggests, with various subjects: types of diseases, the four pillars of treatment (catuṣpād), rules for the collection and inspection of drugs, substitutes for particular drugs, the qualities and effects of the tastes, definitions of various effects of drugs, definitions of vīrya, vipāka and prabhāva.

The *Bhāvaprakāśanighaṇṭu*¹⁹ is arranged in twenty-three groups (varga) of substances: haritakyādi (1), karpūrādi (2), guḍūcyādi (3), puṣpa (4), vaṭādi (5), āmrādi (6), dhātuvādi (7), dhānya (8), śāka (9), māṃsa (10), kṛtāṇa (11), vāri (12), dugdha (13), dadhi (14), takra (15), navanīta (16), ghṛta (17), mūtra (18), taila (19), saṃdhāna (20), madhu (21), ikṣu (22), and anekārtha (23).

The seventh prakaraṇa is subdivided into seven parts which deal respectively with weights and measures (1), rules for various pharmaceutical preparations (2), the śodhana and māraṇa of the dhātus, the yantras, the śodhana and māraṇa of the upadhātus, some saṃskāras for the preparation of mercurial compounds, the preparation of rasakarpūra and sindūrarasa, the śodhana and māraṇa of the uparasas and ratnas, the viṣas and upaviṣas (3), snehapāna (4), pañcakarman (5), dhūmapāna, gaṇḍūṣa, etc. (6), and rogiaparīkṣā (7).

The second (5,883 verses) and third (95 verses) khaṇḍa form together the eighth prakaraṇa on therapy (cikitsā), divided into seventy-three chapters, for the major part in the order of the *Mādhavanidāna*. Deviations from this order and additions are: a separate chapter on jvarātisāra (3), the unusual position of the chapter on amlapitta and śleṣmapitta (10) between raktapitta and rājayaḥśman, separate chapters on pittavyādhī (27) and śleṣmavyādhī (28) between āmavāta and vātarakta, a separate chapter on plīhayakṛdroga (33) between gulma and hṛdroga, and on kārśya (40) after sthauḷya (= medoroga), the description of bradhma in the chapter on vṛddhi (43), a separate chapter on liṅgārśas (52) between upadamaśa and śūkadoṣa, on snāyuroga (57) between visarpa and visphoṭaka, and on phiraṅgaroga (59) after visphoṭaka, the description of śītalā in

the chapter on *masūrikā* (60), a separate chapter on *somaroga* and *mūtrātisāra* (69) between *strīroga* and *yoniroga*, the description of *yonikanda* in the chapter on *yoniroga* (70), and the addition of two chapters on *vājīkaraṇa* (72) and *rasāyana* (73), which form together the third *khaṇḍa*.

The chapters on therapy begin with verses on *nidāna* which are largely taken from Mādhava's *Rugviniścaya*; verses from other sources have been added rather frequently. The verses on treatment give precedence to āyurvedic prescriptions, which are followed by iatrochemical formulae (*rasayogas*).²⁰

Authorities referred to in the text of the treatise itself are: *Agniveśa* (73.140–143; *cikitsā* 1.762), *Bhairavānanda* (*cikitsā* 72.29–30),²¹ *Candramauli* (3.18),²² *Caraka* (*Nighaṇṭu*, *dhānyavarga* 40), *Dhanvantari* (3.325; 4.5) *Hārīta* (*Nighaṇṭu*, *vāri* 75–76; *cikitsā* 54.137–141),²³ *Jaijāṭa* (*Nighaṇṭu*, *dugdha* 32), and *Suśruta* (3.65; *Nighaṇṭu*, *dhānyavarga* 40).

Sources mentioned in ed. m are: *Agniveśa* (*cikitsā* 1.762), *Ātreya* (*cikitsā* 1.30), *Cakradatta* (*cikitsā* 1.26 and 245; 24.265–272), *Caraka* (passim), *Dhanvantari* (*cikitsā* 1.272), *Hārīta* (73.139; *cikitsā* 1.19–20), *Kāśīkhaṇḍa* (*cikitsā* 60.70–82), *Kāśyapa* (*cikitsā* 6.30), *Rasāmṛta* (73.199), *Rasapradīpa* (73.21–24; *cikitsā* 1.579–581 and 582–586), *Rasaratnapradīpa* (*cikitsā* 1.191–192 and 612–615; 6.95–98), *Rasendracintāmaṇi* (*cikitsā* 1.587–588 and 608–611; 6.90–94; 11.81–85), *Ratnamālā*²⁴ (*Nighaṇṭu*, *dhātuvādi* 188), *Śārṅgadhara* (3.212; *cikitsā* 11.86–90), *Suśruta* (passim), *Vāgbhaṭa* (passim), *Viṣṇudharmottara* (*Nighaṇṭu*, *dhātuvādi* 168–169), *Viśvāmitra* (*cikitsā* 71.139), *Vṛddhasuśruta* (*Nighaṇṭu*, *vāri* 65–67; *cikitsā* 1.78), *Vṛddhavāgbhaṭa* (5.10–11), and *Vṛndaṭīkā* (*cikitsā* 1.235–236 and 249–251).

Sources mentioned in the glosses (*ṭippaṇī*) of ed. m are: *Amara* (73.27; *cikitsā* 1.245 and 671; 2.5; 24.20), *Amarasīma* (6.13; *cikitsā* 1.660; 24.75; 71.140–141), *Bhoja* (3.146 and 178; 5.317; *cikitsā* 19.14; 46.19; 54.28 and 46; 66.29), *Cakradatta* (*cikitsā* 1.93 and 99), *Caraka* (passim), *Dhanvantari* (*cikitsā* 1.208), *Dhanvantarinighaṇṭu* (*cikitsā* 1.93; 5.63; 43.35; 44.32), *Dravyaguṇagrantha* (*cikitsā* 1.684),²⁵ *Ḍṛḍhabala* (*cikitsā* 1.440–444), *Gadādhara* (*cikitsā* 1.119 and 440–444; 63.52), *Gayadāsa* (3.146; *cikitsā* 32.5; 34.2), *Guṇaratnamālā* (*cikitsā* 24.1–2), *Hārīta* (*cikitsā* 1.30, 99, 401 and 541; 46.18), *Jaijāṭa* (*cikitsā* 1.734–735), *Jatūkarṇa* (*cikitsā* 1.98), *Jejāṭa* (*cikitsā* 1.9; 6.32; 24.215–219; 32.5 and 17–18), *Kārttika* (*cikitsā* 1.119 and 401; 63.52), *Kārttikakuṇḍa* (*cikitsā* 1.9), *Kharanāda* (*cikitsā* 1.99 and 724), *Madanapāla* (76.233–234; *cikitsā* 1.111; 5.63), *Madhukoṣa* (3.123), *Medinīkāra* (*cikitsā* 1.36), *Nighaṇṭu*²⁶ (76.225; *cikitsā* 1.625), *Rasapradīpa* (3.123; *cikitsā* 1.415–417, 598–601 and 602–604; 8.35–38), *Rasaratnākara* (*cikitsā* 1.180–181), *Suśruta* (passim), *Śārṅgadhara* (*cikitsā* 11.86–90), *Vāgbhaṭa* (passim), *Vaideha* (*cikitsā* 1.2), *Vaṅgasena* (*cikitsā* 1.93 and 578), *Videha* (*cikitsā* 1.703 and 800; 63.14, 77, 105, 125 and 128; 65.18), *Viśvaparakāśa* (*cikitsā* 72.3), *Vṛddhavāgbhaṭa* (3.82 and 201; *cikitsā* 1.107), *Vṛnda* (*cikitsā* 1.93), *Vṛndaṭīkā* (*cikitsā* 1.235–236 and 249–251), and *Vyāsa* (5.305–306).²⁷

Numerous sources, in ed. m and in the *ṭippaṇīs*, are indicated by means of references to *anye*, *eke*, *granthāntara*, etc.

Important sources have often remained unmentioned: *Dhanvantariyanighaṇṭu*,²⁸ *Madanapāla*,²⁹ *Rājanighaṇṭu*,³⁰ *Rasaratnākara*,³¹ *Śārṅgadhara*,³² *Vaṅgasena*,³³ and the

Yogaśataka.³⁴ Bāpālā claimed that Bhāvamīśra borrowed from Kaiyadeva.³⁵

Bhāvamīśra or the *Bhāvaprakāśa* are quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva*, Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Ananta's *Pratāpakalpadruma*, the *Ārogyāmṛtabindu*, the commentary on the *Āyurvedābhdhīsāra*, the *Āyurvedīya Khanijavijñāna*, Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, Bhānuji Dīkṣita's commentary on the *Amarakoṣa*, the *Bṛhannighaṇṭuratanākara*, Devasiṃha Viṭṭhal's *Bṛhadāsavāriṣṭasaṃgraha*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, Gaṇanāthasena's commentary on his own *Siddhāntanidāna*, Gulrājśarmamiśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasatarangiṇī*, Hariprapanna's *Rasayogasāgara*, Jīvanandavidyāsāgara's commentaries on Kaṇāda's *Nāḍīvijñāna* and Gopālakṛṣṇa's *Rasendrasārasaṃgraha*, Jñārasarāmaśarman's *Anupānadarpaṇa*, Kṛṣṇadatta's commentary on Trimalla's *Śataśloki*, Mādhava Upādhyāya's *Āyurvedaprakāśa*, Mallinātha's commentary on the *Amarakoṣa*,³⁶ Mauktika's *Vaidyamuktāvalī*, Meghamuni's *Meghavinoda*,³⁷ the *Nāsīrasāhī Kaikāligrantha*,³⁸ Nirañjanaprasāda Gupta's *Pāradasaṃhitā*, the *Pākārṇava*, Raghunātha's *Bhojanakutūhala*, Rājesvaradatta Miśra's *Svasthavṛttasamuccaya*, Raṅgayotirvid's *Vicārasudhākara*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, Priyavrat Śarmā's auto-commentaries on his *Āyurvedadarśana* and *Dravyaguṇasūtra*, Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, Śivadatta's commentary on his *Śivakoṣa*, Śivamiśra's *Vaidyāśāstraśivānubhava*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Sukhānanda's commentary on Lolimbarāja's *Vaidyājīvana*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Trimalla's *Bṛhadयोगatarangiṇī*, Vidyāpati's *Vaidyarahasya*, Vinodalālasena's *Āyurvedavijñāna*, Yādavji Tṛkamji's *Rasāmṛta*, the *Yogaratnākara*, a *Yogasamgraha*,³⁹ Yogendranātha's *Āyurvijñānaratanākara*, and Yogīndranāthasena's commentary on the *Carakasamhitā*.

Numerous verses of the *Bhāvaprakāśa* are found in Ṭoḍara's *Āyurvedasaukhyā*. The *Bhāvaprakāśa* is one of the major sources of Pratāpasimha's *Amṛtasāgara* and Jñārasarāma's version of that work; it is also a source of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*, the *Bheṣajasaṃhitā*, *Rasendrasambhava* and *Rasoddhāratantṛa*. Harṣakīrti is said to have borrowed some formulae from the *Bhāvaprakāśa*.⁴⁰ The *Bhāvaprakāśa* was one of the sources of Kalyāṇa's *Bālatantra* according to Vācaka Dīpacandra.⁴¹

The *Bhāvaprakāśanighaṇṭu* was one of the sources of Raghunāthaji's *Nighaṇṭusaṃgraha* and the major source of Āryadāsa Kumārasimha's *Mahauśadhanighaṇṭu*. It is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*,⁴² Haridattaśāstrin's commentary on the *Rasatarangiṇī*, the *Śāligṛāmanighaṇṭubhūṣaṇa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.⁴³

Commentaries on the Bhāvaprakāśa

Bhāvamīśra himself is reported to have written glosses (tippanī) on his *Bhāvaprakāśa*.⁴⁴ These glosses contain interesting information of diverse kinds: explanations which sometimes refer to the views of earlier authorities, quotations, various readings,⁴⁵ synonyms and vernacular names of drugs,⁴⁶ the relative quantities of

the ingredients of some compound formulae,⁴⁷ vernacular names of diseases,⁴⁸ etc. Another commentary, incompletely preserved and called *Śrīraṇavīrasīṃhadevālokanasadvaidyasiddhāntaratnākara*, was written by Jayadeva, son of Jayakṛṣṇa, during the reign of king Raṇavīrasīṃha of Kāśmīr⁴⁹ who ascended the throne in 1857.⁵⁰

Special features of the Bhāvaprakāśa

Special features of the *Bhāvaprakāśa* are: (1) the description of three nāḍīs, called respectively samīraṇa, cāndramasī and gaurī, in the female genitals (2.17–20);⁵¹ the authority referred to on this subject is Candramauli; (2) the distinction of eight chief parts of the body (aṅga):⁵² head, neck, arms, chest, belly, the lateral parts of the chest, back and backbone, legs (3.65–93); (3) the adoption of the kedārikūlyānyāya as the best model of the way in which the rasa nourishes the other dhātus (3.176); (4) the description of one kind of ojas, of the aṣṭabindu type (3.181–186); (5) the enumeration of the eight auspicious objects (aṣṭamaṅgala; 5.106);⁵³ (6) the description of the way to ward off the evil eye (dṛṣṭidoṣa; 5.131–132);⁵⁴ (7) the distinction of six types of food: cūṣya, peya, lehya, bhojya, bhakṣya and carvya (5.144);⁵⁵ (8) the ways to recognize the best kind of a number of drugs (6.111–120); (9) substitutes for a number of drugs (6.138–166);⁵⁶ (10) the statement that the chief (pradhāna) drug may not be substituted in compound formulae (6.167); (11) the description of the actions and effects of the twenty qualities of drugs (6.203–211); (12) the definitions of pācana, etc. (6.212–237);⁵⁷ (13) the examination (parīkṣā) of a patient by means of darśana, sparśana and praśna (7.1–22); darśana is divided into netra-, jihvā- and mūtraparīkṣā;⁵⁸ nāḍīparīkṣā⁵⁹ is described as a form of sparśana; (14) the description of three series of thirteen saṃnipāta fevers; the first series (cikitsā 1.449–491), taken from Vaṅgasena (jvara 354–383) for the greater part,⁶⁰ consists of viśphā-raka,⁶¹ āśukārin, kampana, babhra,⁶² śīghrakārin, bhallu,⁶³ kūṭapākala, saṃmohaka, pākala, yāmya, krakaca, karkaṭaka,⁶⁴ and vaidārika;⁶⁵ the second series (cikitsā 1.493–505),⁶⁶ for the major part from some unknown source,⁶⁷ consists of śītagātra, tandrika, pralāpaka, raktaṣṭhīvin, bhugnanetra, abhinyāsa, jihvaka, saṃdhiga, antaka, rugdāha, cittabhrama, karṇika, and kaṇṭhakubja; the third series (cikitsā 1.510–522),⁶⁸ consists of kumbhīpāka, prorṇunāva, pralāpin, antardāha, daṇḍapāta, antaka, eṇīdāha, hāridraka, ajaghoṣa, bhūtahāsa, yantrāpīḍa, saṃnyāsa, and saṃśoṣin; this series is also found, in different orders, in *Jvaratīrīśatī* (175–187), *Jvaranirṇaya* (4.102–115) and *Jvaratimirabhāskara* (7.308–337); (15) the description of a fever caused by the drinking of contaminated water (durjaladoṣajajvara; cikitsā 1.830–838); (16) the treatment of the ten complications of fever (cikitsā 1.840–863); (17) the description of six types of ajīrṇa (cikitsā 6.16–21) and their treatment (cikitsā 6.128–148); (18) a list of eighty disorders by vāta considerably differing from Caraka's list and consisting of: ⁶⁹ śirograha (24.18), alpakṛṣṭatā, atyarthajambhā (24.20), hanugraha (24.24–25), jihvāstambha (24.43), gadgadatva (24.45), minminatva (24.45), mūkatā (24.45), vācālātā, pralāpa (24.51), rasānabhijñātā (24.53), bādhīrya, karṇanāda, sparśājñātva (24.59: tvakśūnyatā or suptavāta), ardita (24.60–63), manyāstambha (24.75), bāhuśoṣa (24.79), apabāhuka (24.81), viśvācī (24.86), ūrdhavāta (24.90), ādhmāna (24.93), pratyādhmāna (24.105), vātāṣṭhīlā (24.107–108), pratyāṣṭhīlā (24.109), tūnī (24.112),

pratitūnī (24.113), vahnivaiṣaṁya, āṭopa, pārśvaśūla, trikaśūla (24.115), muhuramūtra-
 ṇa (24.122–128), mūtranigraha (24.122–128), malagādhātā, puriṣāpravṛtti, gṛdhrasī
 (24.129–132), kalāyakaḥṇajāṭā (24.153), khañajāṭā (24.151), paṇḡutā (24.151), kroṣṭu-
 śīrṣa (24.155), khallī (24.158), vātakaṇṭaka (24.160), pādahaṛṣa (24.165), pādadhāna
 (24.162), daṇḍakākṣepa, vātapittakṛtākṣepa (24.167–169: ākṣepa), daṇḍāpātānaka
 (24.170), abhigāhātākṛtākṣepa, āntarāyāma (24.181–183), bāhyāyāma (24.184–185),
 dhanurvāta (24.187: dhanuḥstambha), kubjaka (24.188), apatantra (24.191–192),
 apātāna (24.198–199), pakṣāghāta (24.204–205), akhilāṅgaka (24.213: sarvāṅgavāta),
 kampa, stambha, vyathā, toda, bheda, sphuraṇa, raukṣya, kāṛṣya, kāṛṣṇya, śaitya,
 lomahaṛṣaṇa, aṅgamarda, aṅgavibhraṇṣa, śīrṣaṇkoca, aṅgaśoṣa, bhīrutva, moha,
 calacittatā, nidrānāśa, svedanāśa, balahāni, śukrakṣaya, rajonāśa, garbhanaśa, and
 paribhrama (24.4–16);⁷⁰ (19) the enumeration of forty pitta disorders (cikitsā 27);⁷¹
 (20) the enumeration of twenty kapha disorders (cikitsā 28);⁷² (21) the employment
 of the term jaratpitta (śūla) as a synonym of pariṇāmaśūla (cikitsā 30.75, 83 and 89);
 (22) the earliest description of syphilis (phiraṅgaroga; cikitsā 59) and its treatment;
 this disease is said to be contracted through intercourse with strangers from the West
 (phiraṅga); an external, internal and combined type are distinguished; the lesion
 of the nose (nāsābhaṅga) is already known as a late symptom (upadrava); drugs
 recommended in the treatment of syphilis are rasakarpūra⁷³ and other mercurial
 preparations, copacīni,⁷⁴ and ākākarabha;⁷⁵ (23) the description of śītalā in the
 chapter on masūrikā (cikitsā 60.55–92);⁷⁶ seven types are distinguished: brhatī,
 kodravā, pāṇisahā, sarṣapikā, a type described as rājikākṛti,⁷⁷ another type of which
 the name is left unmentioned,⁷⁸ and carmajā;⁷⁹ the recitation of a hymn to the goddess
 Śītalā (60.70–82)⁸⁰ is said to cure the disease; (24) the description of thirty-four
 diseases of the nose (cikitsā 65.1–3);⁸¹ (25) the description of some contraceptives
 (cikitsā 70.33–34);⁸² (26) some formulae of pākas.⁸³

Some of the surgical instruments mentioned are: avāṇmukha,⁸⁴ candracakra,⁸⁵
 candrārḍha,⁸⁶ eṣaṇī,⁸⁷ kharjūrapatraka,⁸⁸ sūci,⁸⁹ sūcimukha.⁹⁰

Noteworthy among the medicinal plants and other substances found in the
Bhāvaprakāśanighaṇṭu are:⁹¹ alambuṣā (guḍūcyādi 274);⁹² several types of āluka
 (śāka 94–95);⁹³ ālukī as a variety of raktālu (śāka 98);⁹⁴ āmragandhiharidrā (harī-
 takyādi 198–199);⁹⁵ āmrāvarta, a substance prepared from mango juice (āmrādi
 15–16); amṛtaphala (āmrādi 127);⁹⁶ aranyahaladī (harītakyaḍi 200);⁹⁷ āsmantaka
 as a synonym of kāñcanāra (guḍūcyādi 101–102); the drugs forming the group
 called aṣṭavarga are elaborately described and their substitutes are also mentioned
 (harītakyaḍi 120–144); bhaṅgā (harītakyaḍi 233–234);⁹⁸ candraśūra (harītakyaḍi
 96–97);⁹⁹ caturbīja, i.e., the seeds of methikā, candraśūra, kālāṇḍī and yavānikā
 (harītakyaḍi 98–99); chāḅāntrī as a synonym of vṛddhadārūka¹⁰⁰ (inserted between
 guḍūcyādi 210 and 211); chikkani (guḍūcyādi 304);¹⁰¹ ciciṇḍa (śāka 62);¹⁰² cīnāka
 (dhānya 78);¹⁰³ cīnākakarpūra (karpūrādi 4);¹⁰⁴ coka, i.e., the root of *Argemone mex-*
icana Linn. (harītakyaḍi 176–177); damanaka (puṣpa 67–68);¹⁰⁵ two types of dantī:
 laghudantī¹⁰⁶ and dravantī¹⁰⁷ (guḍūcyādi 197–200); dārusitā (karpūrādi 66–67);¹⁰⁸
 two types of devadālī: devadālī¹⁰⁹ and pītadevadālī¹¹⁰ (guḍūcyādi 291–292); ḍiṇḍiśa
 (śāka 83–84);¹¹¹ ḍoḍikā (śāka 87–88);¹¹² dvīpāntaravacā (harītakyaḍi 107–108);¹¹³

gandhakokilā (karpūrādī 117);¹¹⁴ gandhamālātī (karpūrādī 117);¹¹⁵ two types of hapuṣā (haritakyādī 109–110);¹¹⁶ haricandana (karpūrādī 14–15);¹¹⁷ two types of indravāruṇī: indravāruṇī and mahāphalā indravāruṇī (guḍūcyādī 203–206);¹¹⁸ two types of jāti:¹¹⁹ jāti and svarṇajātikā¹²⁰ (puṣpa 27–28); several varieties of kadālī (āmṛādī 35);¹²¹ kalambī (śāka 19);¹²² kaṅkuṣṭha (dhātavādī 163–164);¹²³ three types of karaṇja (guḍūcyādī 119–124): karaṇja, pūtikaraṇja and karaṇjī;¹²⁴ three types of kastūrī: kāmārūpodbhavā, naipālī and kāsmīrī (karpūrādī 5–8); three types of kharjūrīkā: bhūmi-¹²⁵ and piṇḍakharjūrīkā,¹²⁶ as well as choḥārā; sulemānī is a variety of piṇḍakharjūrīkā (āmṛādī 115–122); ahiphenaka (haritakyādī 235–240);¹²⁷ kiṅkirāta (puṣpa 44–45);¹²⁸ kukundara (guḍūcyādī 305–306);¹²⁹ three types of kuṅkuma: kāsmīradeśaja, bāhlikadeśasaṃjāta and pārasīka (karpūrādī 74–78);¹³⁰ kūṭaśālmali (vaṭādī 58–59);¹³¹ loṇ¹³² and bṛhallōṇī¹³³ (śāka 20–22); various kinds of lotuses and water-lilies (puṣpa 1–18); mācīkā (haritakyādī 167–168);¹³⁴ makhāṇna (āmṛādī 91);¹³⁵ mārkaṇḍīkā (guḍūcyādī 289–290);¹³⁶ matsyākṣī (guḍūcyādī 266);¹³⁷ two types of mūlaka: laghu- and nepālamūlaka (śāka 99–103);¹³⁸ nāgadamanī (guḍūcyādī 299–301: = balāmoṭā);¹³⁹ nāgapuṣpī (guḍūcyādī 252);¹⁴⁰ pāṇiyataṇḍulīya (śāka 14: = kañcaṭa);¹⁴¹ pārasīkavacā (haritakyādī 104);¹⁴² pārasīkayavānī (haritakyādī 80);¹⁴³ parparāṭī (karpūrādī 127–128);¹⁴⁴ puṣkaramūla (haritakyādī 174–175)¹⁴⁵ is regarded as a variety of kuṣṭha; sarpākṣī (guḍūcyādī 267–268);¹⁴⁶ two types of śatāvarī: śatāvarī-¹⁴⁷ and mahāśatāvarī¹⁴⁸ (guḍūcyādī 184–188); sinduvāra and nirguṇḍī are described as two related plants with white, respectively blue flowers (guḍūcyādī 113–114); śīrīṣīkā (vaṭādī 71);¹⁴⁹ two types of sugandhā: ugragandhā (= kulīñjana)¹⁵⁰ and sthūlagranthī¹⁵¹ (haritakyādī 105–106); svarṇavallī (guḍūcyādī 149);¹⁵² śvetakhadira (vaṭādī 33);¹⁵³ śyonāka and kaṭvaṅga as synonyms (guḍūcyādī 25–26);¹⁵⁴ two types of tagara: tagara and piṇḍatagara¹⁵⁵ (karpūrādī 28–29); tuvarī (dhānya 68: different from ādhakī);¹⁵⁶ vanyā methikā (haritakyādī 95);¹⁵⁷ vārṣikī (puṣpa 25–26);¹⁵⁸ two types of vāstuka: vāstuka¹⁵⁹ and gaḍavāstuka¹⁶⁰ (śāka 5–7); two types of yūthikā: yūthikā¹⁶¹ and pītayūthikā¹⁶² (puṣpa 29–30).¹⁶³

Some drugs, prescribed in the chapters on therapy, are absent from the *Bhāvaprakāśanighaṇṭu*, e.g., ākarakarabha (cikitsā 72.76),¹⁶⁴ bhavaliṅgī (70.31)¹⁶⁵ and īśaliṅgī (70.32),¹⁶⁶ mājūphala (72.39), pārśvapippala (70.29),¹⁶⁷ rasālakāṇḍa (24.313),¹⁶⁸ and vajrāṇḍī (41.59).¹⁶⁹

Some dishes described in the *Nighaṇṭu* are:¹⁷⁰ balabhadrikā (kṛtāṇna 36), be-
hamikā (41–43), dhūmasī (37), dugdhakūpikā (132–136), harīsā (90–93), jāli (160–161), jharjharī (38), karpūranālikā (117–118), kuṇḍalīnī (137–142), kvathitā (69), roṭikā (30–32),¹⁷¹ sampāva (112–116),¹⁷² sevikā (19–20), tāpaharī (11–14), ūcī (179), and vesana (78).¹⁷³

The *Nighaṇṭu* describes a large number of fishes in its māṃsavarga:¹⁷⁴ atisū-
kṣmamatsya (124),¹⁷⁵ bhakura (107),¹⁷⁶ daṇḍamatsya (116), eraṅga (117),¹⁷⁷ garaghnī (119), gargara (113), illīsa (111),¹⁷⁸ kavikā (114), kṣudramatsya (123),¹⁷⁹ madgura (120), mahāśaphara (118),¹⁸⁰ mocikā (108), pāthīna (109), proṣṭhī (122),¹⁸¹ rohita (104–105), sapādamatsya (121),¹⁸² śaṣkulī (112), śīlīndhra (106),¹⁸³ śṛṅgin (110), and varmimatsya (115).

The headings of the descriptions of plants, etc., contain numerous vernacular names

and, occasionally, references to the region where these names are used.¹⁸⁴

The dhātuvādivarga describes seven dhātus: suvarṇa (gold), rūpya (silver), tāmra (copper), raṅga (= vaṅga: tin), yaśada (zinc), śīsa (lead), and loha (iron) (1–52), and seven upadhātus: svarṇamākṣika, tāmamākṣika, tuttha, kāmsya, rīti (= pittala), sindūra, and śilājatu (53–85). Mercury (rasa) is described and some saṃskāras are referred to (86–100). The uparasas are: gandha, hīṅgula, abhra, tālaka, śilā, sroto'ñjana, ṭaṅkaṇa, rājāvartaka, cumbaka, sphaṭikā, śaṅkha, khaṭī, gairika, kāsīsa, rasaka, kaparda, sikatā, bola, kaṅkuṣṭha, and saurāṣṭrī (101–164); the nine ratnas (gems) are: ratna (diamond), gārutmata (emerald), puṣpārāga (topaz), māṇikyā (ruby), indraṇīla (sapphire), gomeda (onyx), vaiḍūrya (cat's eye), mauktika (pearl), and vidrūma (coral) (165–188); the uparatanas are only partially enumerated (189–190); the nine poisonous substances (viṣa) are: vatsanābha, hāridra, saktuka, pradīpana, saurāṣṭrika, śṛṅgika, kālakūṭa, hālāhala, and brahmaputra (191–205); seven upaviṣas are enumerated: arkaṅkṣīra, snuṭīkṣīra, lāṅgalī, karavīraka, guñjā, ahiphena, and dhattūra (206).

The Guṇaratnamālā

(2) The *Guṇaratnamālā*¹⁸⁵ is a work on dietetics and materia medica in twenty-six chapters (varga).¹⁸⁶ Many of its verses are identical with or similar to verses found in the *Bhāvaprakāśanighaṭṭu*, but it is more elaborate and contains additional information.¹⁸⁷ It is quoted in Bhāvamīśra's own glosses on the *Bhāvaprakāśa*,¹⁸⁸ probably in Śivadatta's commentary on his *Śivakoṣa*,¹⁸⁹ and in Ṭoḍara's *Āyurvedasaukhyā*.¹⁹⁰

The author

Bhāvamīśra,¹⁹¹ son of Miśralaṭakana,¹⁹² was a brāhmaṇa¹⁹³ who resided in Northern India.¹⁹⁴ It is said that the *Bhāvaprakāśa* had great authority in Mahārāṣṭra.¹⁹⁵ Some scholars are of the opinion that Bhāvamīśra may have been one of those who compiled Ṭoḍaramalla's *Āyurvedasaukhyā*.¹⁹⁶

Date

The chronological position of the *Bhāvaprakāśa* depends primarily on the introduction into India of syphilis (phiraṅgaroga) and of sarsaparilla (copacīnī),¹⁹⁷ one of the main drugs used in its treatment. It is usually claimed that the Portuguese imported the disease,¹⁹⁸ and that sarsaparilla was made known to them at Goa by Chinese traders about 1535.¹⁹⁹ The *Bhāvaprakāśa* must therefore have been composed after that date. The lower limit depends on the reliability of the date of completion, 1558/59, of one of the MSS.²⁰⁰ Several arguments can be adduced to assign Bhāvamīśra roughly to the period 1550–1590: Ṭoḍaramalla's *Āyurvedasaukhyā*, compiled between 1572 and 1589 probably quotes Bhāvamīśra's *Guṇaratnamālā*; Śivamīśra quotes the *Bhāvaprakāśa* in his *Vaidyaśāstraśivānubhava*, written in 1604/05, as well as Bhānuji Dikṣita in his commentary on the *Amarakoṣa*,²⁰¹ dating from the first half of the seventeenth century;²⁰² Harṣakīrti (1535–1610) may have been influenced by Bhāvamīśra in some of his prescriptions,²⁰³ as well as Lolimbarāja (last quarter of the sixteenth century).²⁰⁴

Dalapati(rāja)

Dalapati, or Dalapatirāja, son of Vallabha and pupil of Sūryapaṇḍita, wrote his *Vaidyadarpaṇa* at the end of the fifteenth or the beginning of the sixteenth century.²⁰⁵

Dāmodara, alias Jñānadeva

Dāmodara, alias Jñānadeva, was the author of (1) *Vyādhyaṅga*, and (2) a commentary on Lolimbarāja's *Vaidyajīvana*.²⁰⁶ This Dāmodara belongs to the end of the sixteenth or the beginning of the seventeenth century, since a MS of his commentary on the *Vaidyajīvana* dates from 1612/13.

Deveśvara or Deveśvaropādhyāya

Deveśvara, or Deveśvaropādhyāya, son of Murāri, wrote a monograph on women's diseases, called *Strīvilāsa*. The author was a śrīgaṇḍa brāhmaṇa who probably lived in Gujārāt, since Gujārātī words are met with in his treatise. The work dates from the sixteenth or seventeenth century.²⁰⁷ It is quoted in the *Rasayogasāgara*.²⁰⁸

Gopāla Vaidya

Gopāla Vaidya, son of Mahādeva, composed the *Anubhavasāra* in the sixteenth century.²⁰⁹

Haṁsarāja or Haṁsanātha

Haṁsarāja or Haṁsanātha²¹⁰ was the author of (1) the *Bhīṣakcakkacittotsava*,²¹¹ also called *Haṁsarājanidāna*,²¹² and (2) the *(Sarva)jvarasamuccayadarpaṇa*.²¹³

Contents

The *Bhīṣakcakkacittotsava* is a treatise on nidāna in about 800 skillful verses of various metres, composed by the author himself. It describes the origins (nidāna) and symptoms (rūpa or lakṣaṇa) of all the diseases recognized by the author, sometimes adding the prodromes (pūrvārūpa),²¹⁴ things beneficial (pathya)²¹⁵ or harmful (apathya),²¹⁶ complications (upadrava),²¹⁷ and signs foreboding death (ariṣṭa).²¹⁸ The pathogenesis (saṁprāpti) of the diseases is not included in Haṁsarāja's work.

Some verses on the examination of the pulse and on the causes of the excitement of the doṣas are mentioned at the beginning of the treatise; it ends with verses on the examination of the urine, the tailabindu method included, and on the types of napuṁsaka (impotence and sexual perversities).

Deities invoked and authorities referred to in the introductory verses (1–8) are: the Aśvins,²¹⁹ Ātreya, Atri(ka),²²⁰ Bharadvāja, Brahmā, Bṛhaspati, Caraka,²²¹ Dāmodara, Dhanvantari,²²² Gautama, Hārta(ka), Mādhava, Nakula, Parāśara, Sarasvatī, Śiva, Śukra, Suśeṇa,²²³ Suśruta, Vāgbhaṭa, and Viṣṇu.

The *Bhīṣakcacrattotsava* is quoted in Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, the *Haṃsarājānīdāna* in the *Ārogyāmṛtabindu*.

The *Haṃsarājānīdāna* has remained a popular work up to the present day,²²⁴ especially among Jain physicians.²²⁵

Special features

The arrangement of the diseases adopted by Haṃsarāja agrees in most respects with that of the *Mādhavanīdāna*. At variance with Mādhava's order are the chapter on bhagandara, placed between those dealing with arśas and ajirṇa, and the description of masūrikā as a variety of pramehapitṭikā, without devoting a special chapter to it as a nosological entity. Haṃsarāja's treatise has no chapters on śoṭha, vṛddhi, vṛṇaśoṭha, śārīravṛṇa, sadyovṛṇa, bhagna, nāḍīvṛṇa, visphoṭa, and masūrikā. Other disorders omitted are urāḥṣata (in the chapter on rājayakṣman), bhrama, nidrā, and saṃnyāsa (in the chapter on mūrchā), paramada (in the chapter on pānātyaya), pariṇāmasūla and annadravaśūla (in the chapter on śūla), galagaṇḍa, apacī, granthi, and arbuda (in the chapter on gaṇḍamālā), and mūḍhagarbha (in the chapters on women's diseases).

In general, the *Bhīṣakcacrattotsava* is much more dominated by the tridoṣa doctrine than the *Mādhavanīdāna*. When compared with the latter, it shows many divergences. The chapter on fevers describes a large number of these which cannot be found in Mādhava's *Rugviniścaya*: one series of thirteen saṃnipāta fevers: saṃdhika, antaka, cittabhrama, rugdāhaka, śītāṅga, tandrika, kaṇṭhakubja, karṇaka, bhugnanetra, raktaṣṭhīvin, pralāpin, jihvaka, and abhinyāsaka²²⁶ (8–12); moreover, ajirṇajvara (12), raktajvara (12), dṛṣṭijvara (13), vidjvara (13), khedajvara (13), dhātuḥṣayajvara (15), mahendrajvara (16), velājvara (16), ekāṅgaajvara (17), and a second type of antakaajvara (17). The following names are given to the mythical shapes of fever: bībhatsa-, triśiro-, kapila-, bhasmavikṣepaka-, tripāda-, piṅgākṣa-, mahodara-, and jvaladvigrahaajvara (24–26). The chapter on arśas has no raktaja and sahaja types. The varieties of bhagandara differ from those in the *Mādhavanīdāna*; a vāta, pitta, and saṃnipāta type are described. The chapter on ajirṇa deals with three types only, by vāta, pitta and kapha, while the *Mādhavanīdāna* has six types. The chapter on pāṇḍuroga refers to the variety brought about by the ingestion of clay (mr̥d), without describing its symptoms, and adds a type caused by betel nuts (pūgīphala). The chapter on kāmālā, kumbhakāmālā and halīmaka adds the symptoms of the disorder called pānakī.²²⁷ The types of śoṣa caused by sexual excesses, etc., are omitted in the chapter on rājayakṣman. The chapter on kāsa has only doṣaja types; the kṣataja and kṣaya ja types of Mādhava are absent. The chapter on hikkā adds varieties occurring in children and in the elderly. The chapter on śvāsa enumerates the symptoms of svābhāvika-, ati- and mahāśvāsa instead of those of the five types of Mādhava. Haṃsarāja distinguishes three doṣaja types of svarabhedā and omits the other ones described by Mādhava. The same applies to aruci. The āgantuja and krimija types of chardi are absent. The eight varieties of tṛṣṇā differ in some respects from those described in the *Mādhavanīdāna*; the āmaja and upasargaja types of Mādhava are replaced by those arising from fear (bhaya) and fatigue (śrama). The chapter on mūrchā and allied conditions describes klama instead of tandrā. The variety of unmāda caused by viṣa is absent.

The specific types of vātavyādhi of the *Mādhavanidāna*, beginning with pakṣava-dha, are not separately dealt with; some of these disorders are referred to, for example khāñjya (68 and 70), gr̥dhraśī (69), daṇḍaka (72 and 74), and pakṣaghāta (73). The chapter on mūtrāghāta describes only doṣaja types, not the specific types of Mādhava. The chapter on prameha mentions successively the types caused by vāta, pitta and kapha, whereas the usual order is the reverse one; the varieties distinguished disagree with those of the *Mādhavanidāna*. Two chapters are devoted to pramehapiṭikā; the first one describes doṣaja types, the second one the series of ten varieties known from the classical saṃhitās and also found in the *Mādhavanidāna*; two of the names are different: vinatā and alajī are replaced by piṇḍikā and vitatāñjalī. Three doṣaja types of gaṇḍamālā are distinguished by Haṃsarāja, as opposed to the single type of Mādhava. The āgantuja type of vidradhi is omitted, as well as the raktaja type of upadaṃśa. The eighteen varieties of śūkadoṣa are referred to, but not systematically described; separately described are only sarṣapikā, kumbhī, saṃmūdhapiṭikā, dīrghikā,²²⁸ and puṣkarikā; the other varieties appear to be included among the doṣaja types mentioned by Haṃsarāja. The eighteen types of kuṣṭha are referred to; eleven of these are separately described: viṣama, audumbara, mūkajihva,²²⁹ maṇḍala, karavāla,²³⁰ kiñī,²³¹ dadru, carmadala, carmakuṣṭha, pāmā, and citrakuṣṭha; the remaining ones are regarded as doṣaja.

Three doṣaja types of amlapitta are distinguished, as opposed to Mādhava's adhoga and ūrdhvaga varieties. The kṣudrarogas are arranged in almost the same order as in the *Mādhavanidāna*, but their number has been reduced: cippa, kunakha, anuśayī, arūṃṣikā, padmīnīkaṇṭaka, jatumañī, and ahīpūta are absent; antrālājī is called añjalī, indraviddhā indravṛddhi, agnirohiṇī jvālāmukhīrohiṇī; parivartikā is replaced by karṇikā. The four types of oṣṭharoga which are not primarily doṣaja are omitted in the chapter on mukharoga; diseases of the gums left out by Haṃsarāja are upakuṣa, khalivardhana and the five varieties of dantamūlanāḍī; paridara is replaced by aṣṭkparīṣara, and a disease called śophakaśa has been added; the disease of the teeth called kapālikā is absent, as well as the disease of the palate called adhrūṣa; the same applies to tālvarbuda and tālupuppuṭa; the diseases of the throat called valaya, ekavṛ-nda, vṛnda, svaraghna, māṃsatāna, and vidārī are absent. Diseases of the ear absent are karṇaśoṭha, karṇārbuda and karṇārśas, as well as the five diseases of the earlobes. Many diseases of the eyes are not described; added are, on the other hand, pūyala,²³² parivāra, and brāhmaṇī. Absent among the diseases of the head are kṣayajaśīroroga, anantavāta, ardhāvabhedaka, and śarikhaka. The chapter on strīroga describes pradara, yonikanda and the twelve yonirogas. The chapter on bālaroga includes the disorders of the breastmilk; among the children's diseases paribhava and mahāpadma are absent; bālagrahas mentioned are Skanda, Śakunī, Revatī, Pūtanā, Maṇḍitā, and Naigameya. The last chapter defines the following types of napuṃsaka: āsekya, saugandhika, kumbhika, īrṣyaka, and the male and female variety of ṣaṇḍha.²³³

A salient feature of Haṃsarāja's work is the absence of diseases like bradhma, snā-yuka, somaroga and phiraṅga, added to āyurvedic nosography after Mādhava's age.

The author

His name is Haṃsarāja in the last verse of the chapter on mūtraparīkṣā and in the colophons of the edition; he is sometimes called Haṃsanātha.²³⁴ No particulars about him are known.

Date

The terminus post quem of Haṃsarāja's date is provided by a reference to Cāmuṇḍa's *Jvaratimirabhāskara*, composed in 1490 or 1492, in a MS of the *Sarvajvarasamuccayadarpaṇa*.²³⁵ Dāmodara, referred to in the *Bhīṣakcakkacittotsava*, may be the author of the *Ārogyacintāmaṇi*, who lived in the first half of the fourteenth century, or, less probably, the one who composed the *Bhīmavinoda*, a work to be placed after the period of Bhāvamiśra. Other persons called Dāmodara, for example the father of the author of the *Śāringadharasaṃhitā*,²³⁶ need not be taken into account. It is improbable that Haṃsarāja is later than Bhāvamiśra, phiraṅgaroga not being mentioned in the former's work, and the worship of Śītalā in cases of smallpox being referred to in passing only, without describing the disease called after this goddess.²³⁷ The *Bhīṣakcakkacittotsava* can therefore be assigned to the sixteenth century. The earliest author known to quote it is Vācaka Dīpacandra in his *Laṅghanapathyanirṇaya*, composed in 1735/36.

P.V. Sharma²³⁸ places Haṃsarāja in the seventeenth century, basing himself on the reference to Dāmodara, and supposing this Dāmodara to be the author of the *Bhīmavinoda* and of a commentary on Suṣeṇa's *Āyurvedamahodadhī*, called *Ārogyacintāmaṇi*. The coupling of Dāmodara and Suṣeṇa, of some importance to P.V. Sharma's reasoning, is, however, unfounded, since the *Ārogyacintāmaṇi* is not a commentary, but an independent treatise, having nothing to do with Suṣeṇa, and composed by a Dāmodara who, as stated above, lived in the first half of the fourteenth century. The *Bhīmavinoda* appears to be much later than Haṃsarāja's work since it mentions phiraṅgaroga, unknown to the latter. P.V. Sharma has overlooked the reference to the *Jvaratimirabhāskara* in Haṃsarāja's *Sarvajvarasamuccayadarpaṇa*.

Harṣakīrti

Harṣakīrti was the author of the *Yogacintāmaṇi*.²³⁹ Besides this work on medicine he wrote one synonymic and two homonymic dictionaries,²⁴⁰ as well as independent treatises on diverse subjects and a number of commentaries.²⁴¹

The *Yogacintāmaṇi*²⁴² is chiefly a collection of recipes, consisting of about 1,700 verses with an admixture of prose, arranged in seven chapters (adhikāra). Its most conspicuous characteristic is the arrangement of the recipes according to the type of pharmaceutical preparation. Their order, pāka, cūrṇa, guṭikā, kvātha, ghṛta, and taila, differs from that in works which are similarly conceived, such as Candrāṭa's *Yogarātnasamuccaya*, the *Śāringadharasaṃhitā* and the prayogakhaṇḍa of Soḍhala's *Gadanīgraha*. No system can be detected in the series of diseases against which the formulae are to be employed, but the author's acquaintance with the *Mādhavanidāna* is apparent from a list of diseases at the end of the work in the section on karmavipākā.

*Contents.*²⁴³

Chapter one (pākādhikāra; 329 verses) describes aṣṭasthānaparīkṣā,²⁴⁴ i.e., the examination of the pulse (nāḍī),²⁴⁵ urine (mūtra),²⁴⁶ eyes (netra),²⁴⁷ face (mukha),²⁴⁸ tongue (jihvā),²⁴⁹ faeces (mala), voice (svara), and skin (sparśa) of a patient. This section is followed by verses on ariṣṭas, weights and measures,²⁵⁰ and anatomy.²⁵¹ After giving rules for the preparation of a pāka,²⁵² the treatise continues with a long series of recipes of pākas. Chapter two (157 verses) is devoted to cūrṇas, chapter three (180 verses) contains formulae of guṭīkās, chapter four (149 verses) describes kvāthas, chapter five (83 verses) ghr̥tas, and chapter six (117 verses) tailas. Chapter seven (miśrādhikāra) is, in accordance with its title, a composite one. It begins with a table of its contents (7 verses) and deals with preparations called guggulu after its chief ingredient (gugguluprakaraṇa; 52 verses), śankhadrāva (7 verses), the śodhana and māraṇa of rasas, etc., and the preparation of mercury for internal use (163 verses), formulae of rasas (rasaprakaraṇa; 93 verses), āsava (49 verses), lepa (lepa prakaraṇa; 98 verses), bloodletting, nasya, virecana, vamaṇa, sveda, bandhana (bandaging), bāṣpa (vapour-bath), cūrṇamardana (covering the body with a powdered drug), the application of a medicated roṭaka to the head, piṇḍikā or kavālī (a kind of poultice), gaṇḍūṣa, dhūpa, the excellent qualities of takra (diluted buttermilk), various formulae, the symptoms and treatment of madhūraka,²⁵³ various formulae of general application (sādhāraṇayogas), various types of general treatment (sāmānyakāyacikitsā), dambha (cauterization), formulae promoting fertility in women, contraceptive measures and abortifacients (166 verses). The treatise ends with a section on karmavipāka (27 verses) in the form of a dialogue between Sūrya and Aruṇa which includes a list of diseases that closely agrees with the *Mādhavanidāna*.

The authorities consulted by Harṣakīrti are enumerated in one of the concluding verses: Ātreyaḥ, Caraka, Vāgbhaṭa, Suśruta, the Aśvins, Hārīta, Vṛnda, the (*Cikitsā*)-*kalikā*, Bhṛgu,²⁵⁴ Bheda, the (*Mādhava*)-*nidāna*, and *Karmavipāka*. He also refers to a *Yogapradīpa* and the *Yogaśata* in the last verse of his treatise. A cursory examination of the *Yogacintāmaṇi* shows that the *Śārngadharasaṃhitā*, although left unmentioned, may have been an important source of Harṣakīrti.²⁵⁵

Quotations from Harṣakīrti's *Yogacintāmaṇi* are found in Yādavaḥ Trikaṃjī Ācārya's *Siddhāyogasamgraha*. (Harṣakīrti's) *Yogacintāmaṇi* was one of the sources of Devaśiṃha Viṭṭhal's *Bṛhadāsavāriṣṭasamgraha*, Hariprapaṇa's *Rasayogasāgara*, and Pratāpasirṇha's *Amṛtasāgara*.

A *Yogacintāmaṇi* is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasaṃhitā*, Meghamuni's *Meghavinoda*,²⁵⁶ Nidhi's *Yogasamuccaya*, Nirañjanaprasāda Gupta's *Pāradaśaṃhitā*, the *Pākamārtaṇḍa*, Rāmacandra's *Rāmavinoda*,²⁵⁷ the *Rasendrasambhava*, and the *Yogaratanākara*.²⁵⁸ A *Yogacintāmaṇi* was one of the sources of Kalyāṇa's *Bālatantra* according to Dīpacandra.²⁵⁹

A commentary on the *Yogacintāmaṇi* has been written by Narasiṃha, a Jain monk of the Kharataragaccha²⁶⁰ and a pupil of Ratnarājagaṇi.²⁶¹ A *Yogacintāmaṇiṭippaṇa* by Bhavānī Sahāya²⁶² may be a commentary on Harṣakīrti's work.

Special features

Important in the field of diagnostics is Harṣakīrti's description of aṣṭasthānaparīkṣā (3–14), probably the earliest of its kind.²⁶³ Nosologically interesting: are the description of madhūraka (317), the earliest mention of this fever in a Sanskrit medical text; the use of the term nāsūra (296)²⁶⁴ for a kind of ulcer; a disorder called candrikā (295) or candanā (296);²⁶⁵ the occurrence of mṛgavāta (156) and mṛgīvāta (148 and 326) as synonyms of apasmāra; kamalavāta (169) as a synonym of kāmālā; the mention of nīradoṣa (87) or vāriroga (236), mṛdbhakṣaṇavikāras (236), lūtā (189), urograha (215), and pāradavikāra (243); occasional references to specific types of saṃnipāta fever (148: abhinyāsa and antaka; 147: cittabhrama; 148: cittavibhrama; 147, 148, and 167: pralāpa; 167: hāridraka); a reference to different views on the number of fevers to be distinguished (339) and to the dissenting view that the vāta diseases are not eighty but eighty-four in number (329); the absence of prescriptions against phiraṅgaroga, śītalā, snāyukaroga and vardhma.

Important in the field of pharmaceuticals is the separate chapter on pākas, the earliest one in Sanskrit medical literature.

Therapeutically interesting is the use of a mantra, in which a magadhadeśārāya is invoked, in the treatment of madhūraka (318). Among the points suitable for cauterization the brahmasthāna (148) or daśamadvāra (148 and 167) is mentioned, which may betray Tantric influence. A striking feature is also the frequent prescription of ākallaka (and its synonyms),²⁶⁶ mājū(phala)²⁶⁷ (31, 60, 69, 103, 277, 287, 296), mastakī (48, 77, 271) or mastagī (103, 137),²⁶⁸ opium,²⁶⁹ Cannabis,²⁷⁰ and mercury. Honey, a substance forbidden to Jains as an article of diet, is a frequent ingredient of Harṣakīrti's prescriptions.

Noteworthy substances from Harṣakīrti's materia medica, which contains colloquial names and substances of foreign origin, are moreover: cīṇikabābī (46; 265),²⁷¹ cobacīnī (323),²⁷² hemambhodhara (31),²⁷³ hiramajā (297), jāvitri (44),²⁷⁴ jhinjhinī (60),²⁷⁵ kabābī (60),²⁷⁶ kālomjī (311),²⁷⁷ kasela (68),²⁷⁸ kauñca (43),²⁷⁹ khairīragunda (60),²⁸⁰ khurasāṇa (311),²⁸¹ khurasāṇikā (31), kucīla (156),²⁸² muradāśṛṅga (295),²⁸³ phaṭikā (60), rasakarpūra (246),²⁸⁴ saṇa (136),²⁸⁵ sātharī (60),²⁸⁶ sināvāsika (34),²⁸⁷ and śvetāhā (180).²⁸⁸

The author

Harṣakīrti²⁸⁹ was a Jain monk²⁹⁰ of the Tṛpāgaccha²⁹¹ and a resident of Nāgpur.²⁹² His teacher was Candrakīrti²⁹³ and his patron Pravaraśiṃha.²⁹⁴ The vācaka Vidyātīlaka of the Upakeśagaccha may have been one of his collaborators.²⁹⁵

Date

Harṣakīrti's career has been reconstructed by C. Vogel.²⁹⁶ He was active as a scribe as early as 1556/57, had risen to the rank of upādhyāya by 1578/79,²⁹⁷ bore the title of Sūri since 1582 and had passed away in 1616.²⁹⁸ His floruit may thus be fixed tentatively as 1535–1616. These dates agree with internal evidence from the *Yogacintāmaṇi*: the prescription of cobacīnī and rasakarpūra indicate that he is of about the same period as

Bhāvamīśra. The oldest MSS of the *Yogacintāmaṇi* were completed in 1666, respectively 1668.²⁹⁹

Kalyāṇa

Kalyāṇa³⁰⁰ was the author of the *Bālatantra*.³⁰¹

Contents

The *Bālatantra* is a treatise in 831 verses,³⁰² arranged in fourteen chapters (paṭala). It opens with a maṅgalācāraṇa addressed to Gaṇeśa and a verse giving the name of the author, the title of the work and some of its sources.

Chapter one (śoḍaśavandhyāpratīkāra) deals with two series of eight disorders of fertility in women and their treatment. The first series consists of four types of infertility caused by the doṣas (pitta, vāta, kapha, saṃnipāta),³⁰³ two by grahas,³⁰⁴ one type by the wrath of the gods, and one by magic.³⁰⁵ The second series describes eight types of infertile women, called tripakṣā, subhratī, sadbhā, trimukhī, vyāghrīṇī, vakrī, kamalīṇī, and vyaktīṇī.

Chapter two (sādhāraṇavandhyauśadhakathana) is about the treatment of various unspecified types of infertility. Chapter three (puruṣavīryavṛddhikathana) contains recipes which promote male potency, recipes appeasing various disorders in men and women which prevent procreation, recipes of a vājīkaraṇa type, etc. Chapter four (garbhādhānakālarudrasnānakathana) describes rituals, including mantras, for begetting healthy offspring of the desired sex, a ritual to be performed in digging up the lakṣmaṇā plant, which, if put in the right nostril of a woman, guarantees her giving birth to a son,³⁰⁶ and elaborate rules for the rudrasnāna, i.e., a Tantric ritual,³⁰⁷ which ensures a childless couple of the birth of children. Chapter five (garbiṇīgarbharakṣākathana) is concerned with mantras and offerings to twelve gods and groups of deities³⁰⁸ protecting the expectant mother and the child in the womb during the twelve months of pregnancy. Chapter six (sukhāprasavopāyakathana) is devoted to procedures, for the greater part of a magical character, which secure an easy delivery.

Chapters seven to eleven describe grahas³⁰⁹ who attack children, the symptoms they produce, and the ways to ward them off.³¹⁰ Chapter seven (dinagrhitābālagrahaḥara) describes ten grahas³¹¹ who may assault a child during the first ten days of its life,³¹² chapter eight (māsagrhitābālagrahaḥara) twelve who do so during the twelve months of its first year,³¹³ and chapter nine (varṣagrhitābālagrahaḥara) sixteen grahas who prey upon a child during the first sixteen years of its life.³¹⁴ Chapter ten (dinamāśavarṣabālagrahapāyakathana) gives the names of sixteen more grahas,³¹⁵ whose attack can be expected during the first day, month or year, second day, month or year, etc.,³¹⁶ and chapter eleven (sādhāraṇa) mentions common measures against all types of grahas, besides adding nine names of grahas³¹⁷ whose attacks are seen as a punishment for offences committed during a previous life. The measures described in order to ward off attacks by grahas usually consist of offerings (bali) of a specified number of various objects³¹⁸ to be deposited in a particular quarter of the sky,

accompanied by the muttering of mantras.

The subjects of chapter twelve (jvaraharaṇopāyakathana) are: recipes which promote lactation in nursing mothers, the wet-nurse, measures which purify the milk, the treatment of some disorders especially occurring in infants (inflammation of navel, anal region, and mouth), and the therapy of fevers in children. Chapter thirteen (śītalācīkītsākathana) is about the treatment of a long series of children's diseases ending with śītalā.³¹⁹ Chapter fourteen (nānāprayogakathana) deals with diseases of eyes, nose, head, and mouth, and ends with verses about antidotes and rasāyana. The order of the diseases mentioned in chapters thirteen and fourteen partially agrees with the *Mādhavanidāna* but makes a rather chaotic impression.

Sources mentioned by Kalyāṇa are: Dhanvantari (13.39–41), the *Prayogasāra* (1. 2),³²⁰ and Suśruta (1.2).

A commentary in Hindī (mixed with Rājasthānī) on the *Bālatantra* was written by Vācaka Dīpacandra, author of the *Laṅghanapathyanirṇaya* (eighteenth century); its title is *Bālatantrabhāṣāvacanikā* or *Bālatantragranthavacanikābandha*.³²¹ Dīpacandra mentions the following authors and works as sources of Kalyāṇadāsa: Ātreya, *Bhāvaprakāśa*, Bheda, Caraka, Hārīta, *Samnipātakalikā*, Suśruta, Tōḍarānanda, Vāgbhaṭa, *Vaidyakaśāroddhāra*, *Vaidyavinoda*, Vaṅgasena, *Yogacintāmaṇi*, *Yogarātnāvalī*, and *Yogaśata*.³²²

Special features

Kalyāṇa's work shows a great deal of Tantric influence in its descriptions of rituals and in the use of mantras.³²³ Magical elements abound in the therapeutic measures described,³²⁴ which explains the frequent use of substances like excrements, hairs, nails, horns, etc., of various animals. The more remarkable is the almost complete absence of substances and formulae derived from iatrochemistry. Kalyāṇa's materia medica consists for a very large part of medicinal plants and some minerals known from the classical āyurvedic texts. Moreover, his recipes are usually relatively simple.

Mercury is prescribed once only (3.2), opium twice (3.56 and 59), and the seed capsule of the opium-poppy (khasaphala) once only (3.54), while Cannabis is completely absent.

Some remarkable names of plants are: kṣuraka (3.45),³²⁵ putramañjārikā (2.22–23), ratnamālā (1.46), rudrajaṭā (12.89),³²⁶ śivalīngī (2.22),³²⁷ and tejañī (12.87).³²⁸

Noteworthy in the field of nosology are the second series of types of infertile women in chapter one³²⁹ and the occurrence of a disease called ksudraśītalikā (13.90).

The author

At the end of his treatise (14.27–29), Kalyāṇa claims to be a son of Mahīdhara, a devotee of Lakṣmīnṛsiṃha, and a grandson of Rāmadāsa, a paṇḍita of Ahicchattrā³³⁰ lineage and a devotee of Rāmacandra. Kalyāṇa's father, Mahīdhara, is generally considered to be the author of that name who, together with his son Kalyāṇa and other learned brāhmaṇas, composed the *Mantramahodadhī*.³³¹ Mahīdhara, however, mentions in his genealogy that he was a son of Phanūbhadda,³³² a devotee of Rāma, and a grandson of Ratnākara, an Ahicchattrā brāhmaṇa of Vatsagotra. He adds that he is devoted to

Narahari,³³³ that he left his birthplace and moved to Vārāṇasī.³³⁴ If Rāmadāsa³³⁵ were a second name of Phannabhaṭṭa, who was a devotee of Rāma, the chief author of the *Mantramahodadhi* was indeed the father of the author of the *Bālatantra*.³³⁶

Date

Kalyāṇa mentions that he completed his treatise in a Śiva temple in the year 1587/88.³³⁷

Kavikaṇṭhahāra

Kavikaṇṭhahāra,³³⁸ son of Vaidya Trilocana Kavicandra,³³⁹ wrote the *Prayogarātnākara*.³⁴⁰ The author was patronized by prince Rāmacandra and lived in the sixteenth or seventeenth century.³⁴¹

The work begins with the description of the processing of rasas and uparasas, followed by a section on the medicinal uses of animal and vegetable products, but it is chiefly concerned with therapy. The arrangement of the diseases agrees with that of Mādhava.

Sources quoted are Bhīmaparākrama, Garga, Maheśvara, Pradyumna, *Rasaratnadīpa*, and Suśruta. The author puts himself sometimes in opposition to the Southern school (dākṣiṇātyāḥ) and also mentions a Western school (pāścātyāḥ).³⁴² The *Prayogarātnākara* is frequently quoted in the *Samdehabhañjanī*, a compilation on the preparation of medicines, printed at Berhampore in 1868.³⁴³

Kṣemaśarman

The *Kṣemakutūhala* by Kṣemaśarman^{344,345} is a book on cookery and dietetics for use at the royal court.

Contents

The treatise consists of about 1,100 verses arranged in twelve chapters (utsava). Chapter one (vaṃśāvaṇṇana) describes, after two introductory verses, the genealogy of the author (3–18), the composition of the book and its merits (19–22), its contents (23–35), technical terms employed in preparing food (36–50), weights and measures (50–51), rules for the ratio between water and the other ingredients in various dishes (52–58), and rules for the preparation of a rasālā and a pāna (59–60). Chapter two (mahānasopayogyopakaraṇaprasaṃsana) deals with the royal kitchen, its lay-out and its utensils (8–25), and with protection of the king from poison (25–39). Chapter three (vaidyāhārasūpakāraprasaṃsana) describes the qualities of a good physician and cook, and gives general rules to be observed when taking food (1–52). Chapter four (ṛtulaṣaṇacaryāprasāṃsana) gives the behavioural rules during the various seasons (1–38), and chapter five (dinacaryāprasāṃsana) those to be observed during the parts of day and night (1–94). Chapter six (māṃsaprasaṃsana) is about meat dishes (1–214) and chapter seven (matsyamāṃsaprasaṃsana) about fish courses (1–36). Chapter eight (śaḍvidhaśākprasāṃsana) deals with the six types of vegetables and their medicinal qualities (1–207), while chapter nine (piṣṭānnakṛtpṛakāraprasaṃsana)

is about fermented dishes (saṃdhānaka; 1–11) and various kinds of vaṭaka (12–56). Chapter ten (pakvānaprasaṃsana) deals with a long series of dishes (1–144), and chapter eleven (kṣudbodhastuprasaṃsana) with appetizers (1–29). Chapter twelve (gorasapānakādiprasaṃsana) describes the qualities of milk and other dairy produce, as well as drinks (pānaka), to which are added behavioural rules to be observed after finishing a meal (1–121), verses on the author's genealogy (122–124), and some concluding verses (125–127).

The author mentions (1.21) that he wrote his work after consulting the *Gaurīmata*, Caraka, Vāgbhaṭa, *Bhīmasūkti*, Hārīta, Suśruta, and *Ravisiddhapāka*. Authorities referred to in the body of the text are Caraka (3.17), *Gaurīmata* (2.7), Hārīta (3.17), Nala (11.14), and Suśruta (3.17).

The *Kṣemakutūhala* is quoted in Vācaka Dīpacandra's *Laṅghanapathyanirṇaya* and Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*.

Special features

The *Kṣemakutūhala* contains such a large number of interesting technical terms that only a few of these can be mentioned. Seven types of pāka are distinguished: bharjana, talana,³⁴⁶ sveda, pacana, kvathana, tāndūra and puṭapāka (1.37–41). The terms vesavāra, kāsamarda, karāla and uddhūlana are used in the sense of condiment (1.42–50).

Noteworthy among the dishes described are, e.g., aṅgarakarkarī (10.80–81),³⁴⁷ barbara (10.126–127), candrahāsā (10.87), harīsā (6.60–61),³⁴⁸ jalebī (10.122–125),³⁴⁹ karcārī (6.48–49), kāsāra (10.138–141),³⁵⁰ parpaṭa (6.39–40),³⁵¹ samosā (6.131–135),³⁵² sevikā (10.142–144),³⁵³ tāhaḍī (6.43–44),³⁵⁴ taradvaṭī (10.113–115), and veṭikā (10.82–84).³⁵⁵

Remarkable names of plants are bhairāṇḍa (8.91–92), cacēṇḍa (8.42), ḍhehikā (8.185–186), gaulāla (5.34, 39 and 47),³⁵⁶ kohaḍa (8.101–102), makhāṇa (10.98),³⁵⁷ payikā (8.114–117), teṇṭī (8.60–61), tiṇḍisa (8.46–47), and viṣāṇa (8.81–82).

The author

The genealogy of Kṣemaśarman,³⁵⁸ as recorded in the introductory verses, is as follows. He descended from Dvijarāja, a Sannāha(-brāhmaṇa) of the Bharadvājakula, father of the physicians Dharmadhara and Rāma. The latter was the father of Yati who had six sons: Yaśorāja, Mahārāja (a famous physician who served Śaṅkṣara), Prahlāda, Kāmarāja, Hrādani,³⁵⁹ and Tripurārī. Hrādani, who had studied Caraka, Suśruta and Vāgbhaṭa, had five sons: Manmatha, Jayaśarman, Vāmadeva, Paṇḍita and Sūryadāsa. Manmatha, a physician, had two sons, who were also physicians: Kṣemaśarman and Mallinātha. Kṣemaśarman, our author, was an expert in various sciences and served king Vikramasena. Kṣemaśarman's mother, Sītā, of the Nimbaśākhikula, became a sati after her husband's death. Kṣemaśarman's teacher was Sūryadāsa, the youngest brother of his father. One of the last verses of the *Kṣemakutūhala* (12.123) mentions the names of the six sons of Kṣemaśarman: Gopāla, Śivapāla, Mādhavavara, Nārāyaṇa, Rāma and Lakṣmaṇa.

Date

The date of completion of the *Kṣemakutūhala* is given in a verse at the end of the work (12.127)³⁶⁰ as the thirteenth day of the bright half of Kārttika in the year 1605 of the Vikrama era, i.e., A.D. 1549.

Lakṣmaṇa Paṇḍita

Lakṣmaṇa Paṇḍita³⁶¹ was the author of the *Yogacandrikā*,³⁶² also called *Vaidyayogacandrikā*³⁶³ and *Gūḍhaprakāśikā*.³⁶⁴ This work, dealing with materia medica and therapeutics, contains 1,700 verses,³⁶⁵ arranged in thirty-eight chapters.

Authorities referred to in the *Yogacandrikā* are Caraka, Hārīta, Parāśara, and Suśruta.

Lakṣmaṇa's *Yogacandrikā* is one of the sources of Hariprapanna's *Rasayogasāgara*.³⁶⁶

Two more works ascribed to Lakṣmaṇa are a commentary on the *Raghuvamśa* called *Advaitasudhā*³⁶⁷ and the *Sāracandrikā*.³⁶⁸

Lakṣmaṇa was the son of Datta of the Brahmajñānin family. He had three elder brothers, Gaṇeśa, Raghunātha, and Rāma, and one younger brother, Viṭhala,³⁶⁹ and was a southerner, possibly a Mahārāṣṭra brāhmaṇa, who abandoned his property and went to Benares.³⁷⁰ Lakṣmaṇa studied medicine at Benares under the tuition of two brothers, Nāgeśa (or Nāganātha, the author of the *Nidānapradīpa*) and Nārāyaṇa (who wrote the *Jvaranirṇaya* and a commentary on Śārṅgadhara's *Triśatī*), which implies that the *Yogacandrikā* dates from the sixteenth century.³⁷¹

Lokanātha

Lokanātha, a kāyastha, wrote, in 1568, the *Mallaprakāśa*,³⁷² a work ascribed to the author's patron, Malladeva of Yodhapura, who has been identified as Māladeva of Yodhpur, who reigned in the period 1551–1568.³⁷³ The *Mallaprakāśa* describes medicinal preparations, grouped together as ghṛtas, tailas, etc., against various diseases;³⁷⁴ the examination of the pulse is also dealt with.³⁷⁵ Other works by the same author are a *Kāla-jñāna*³⁷⁶ and a *Tṛṣṭyavarāṣṭaka*.³⁷⁷

Lolimbarāja

Lolimbarāja was the author of four medical kāvyas, the *Camatkāracintāmaṇi*, *Vaidyājīvana* and *Vaidyāvataṃsa*, all three written in Sanskrit, and the *Vaidyakakāvya*, written in Marāṭhī. He also composed a religious poem in Sanskrit on the life of Kṛṣṇa, ending with the death of Kaṃsa, called *Harivilāsakāvya*, and a poem in Marāṭhī with the title *Ratnakalācarita*.³⁷⁸

The *Camatkāracintāmaṇi*³⁷⁹ is a kāvya in 242³⁸⁰ ingenious verses of diverse metres,³⁸¹ which are addressed to the poet's beloved as a reply to her questions pertaining to med-

ical matters. The poem therefore abounds with skillful verses extolling female beauty and charms.

Chapter (vilāsa) one (ninety-three verses) has seven introductory verses, which mention the title of the work and a number of sources (Ātreya, Bheḍa, Bhoja, Hārīta, Parāśara); the remaining part deals with the treatment of fevers. Chapter two (thirty-eight verses) contains prescriptions against atisāra and grahaṇī. Chapter three (fifty verses) is about the therapy of a series of unconnected disorders (1–35) and women's diseases (36–50). The diseases mentioned in chapter four (forty-three verses) do not show any systematic arrangement at all. Chapter five (eighteen verses) is concerned with vājīkaraṇa.

The prescriptions of the *Camatkāracintāmaṇi* are simple and contain for the greater part ingredients which are well known from the classical texts.³⁸²

An abundance of pitta is called karālapitta (4.21).

Verses from the *Camatkāracintāmaṇi* form part of Trimalla's *Yogatarāṅgiṇī*³⁸³ and the *Yogarātnākara*.³⁸⁴ Nayanasukha's *Vaidyamanotsava* is said to have been influenced by the *Camatkāracintāmaṇi*.³⁸⁵

The *Vaidyājīvana*,³⁸⁶ regarded as Lolimbarāja's best poem,³⁸⁷ has the same structure as the *Camatkāracintāmaṇi*.³⁸⁸ It consists of 238 skillful verses of diverse metres,³⁸⁹ arranged in five chapters (vilāsa).

Chapter one (eighty-two verses) deals,³⁹⁰ after twelve introductory verses, with fevers,³⁹¹ chapter two (thirty verses)³⁹² with jvarātisāra, atisāra and grahaṇī, chapter three (forty-eight verses)³⁹³ with various disorders (1–37), women's diseases (38–46)³⁹⁴ and children's diseases (47–48), chapter four (fifty-four verses)³⁹⁵ with various disorders, and chapter five (twenty-four verses)³⁹⁶ with vājīkaraṇa.³⁹⁷ The materia medica differs from that of the *Camatkāracintāmaṇi* in including many inorganic substances, in particular for vājīkaraṇa purposes in a number of rasayogas (5.13–20).³⁹⁸ Religious elements in its therapy are rather rare (1.59; 5.23), but allusions to mythology are frequent. One of the formulae is called after the author's wife (ratnakalācūrṇa; 2.23). The only authority referred to is Parāśara (1.25).

The *Vaidyājīvana* is mentioned in Nidhi's *Yogasamuccaya*. The work is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasaṃhitā*, Hanumatprasāda's commentary on the *Siddhabhaiṣajyamañjūṣā*, Hariprapanna's *Rasayogasāgara*, Jñārasarāmaśarma's *Anupānadarpaṇa*, Pratāpasirṣha's *Amṛtasāgara* and Jñārasarāma's version of this work, Trimalla's *Yogatarāṅgiṇī*,³⁹⁹ Vidyāpati's *Vaidyarahasya*,⁴⁰⁰ and the *Yogarātnākara*;⁴⁰¹ it is probably quoted as *Vaidyasaṃjīvanī* in Ananta's *Pratāpakalpadruma* and as *Vaidyakaṣaṃjīvana* in Vācaka Dīpaçandra's *Laighanapathyanirṇaya*. The *Vaidyājīvana* was one of the sources of Raghunātha's *Nighaṇṭusamgraha* and the *Rasodhāratāntra*. Modern works that have incorporated verses from the *Vaidyājīvana* are Yādavjī Trikamjī's *Rasāmṛta* and *Siddhayogasamgraha*,⁴⁰² and the *Vaidyākīya Subhāṣitavalī*.⁴⁰³ The *Vaidyājīvana* has influenced Nayanasukha's *Vaidyamanotsava*,⁴⁰⁴ Raghunātha Paṇḍita's *Cikitsāmañjarī*, and Benīprasāda's *Lolamarāja*.⁴⁰⁵ The work was translated into Hindī verse by Bohare Īśvarīprasāda of Dhaulapura in 1842/43.⁴⁰⁶

Commentators on the Vaidyājīvana

Commentators on the *Vaidyājīvana* are: (1) Dāmodara alias Jñānadeva.⁴⁰⁷ A MS of his commentary dates from 1612/13.⁴⁰⁸

(2) Gosvāmin Harinātha, son of Manohara⁴⁰⁹ and grandson of Lakṣmīdāsa.⁴¹⁰ The title of his commentary is *Gūḥāṛthadīpikā*.⁴¹¹ It is said to have been written in 1673/74.⁴¹² The author was a resident of Kuśapura on the banks of the Vitastā.⁴¹³ Harinātha is also sometimes credited with a *Bhuvaneśvarīstotrabhāṣya*,⁴¹⁴ *Ṣaṭpañcaviṃśakā*, *Svapnādhyāya*,⁴¹⁵ and *Hastapādasamudrikālākṣaṇāni*.⁴¹⁶

(3) Rudrabhaṭṭa,⁴¹⁷ son of Koneribhaṭṭa.⁴¹⁸ Rudrabhaṭṭa's genealogy was as follows:⁴¹⁹ Kṛṣṇabhaṭṭa, Kṛṣṇavaidya or Śrīkṛṣṇa⁴²⁰ of Māṇḍa family,⁴²¹ of Ṣaṭkheṭaka on the Godāvārī, dharmādhikārīn of king Rāmadeva – Haribhaṭṭa or Hīrabhaṭṭa (a physician) – Viṣṇu – Koneribhaṭṭa⁴²² – Rudrabhaṭṭa; Viṣṇu's brother was Nārāyaṇa, author of the *Omākāraṅgrantha*.⁴²³

The earliest dated MS of Rudrabhaṭṭa's commentary, called *Dīpikā*,⁴²⁴ was completed in A.D. 1766.⁴²⁵ Rudrabhaṭṭa, who can be assigned to the seventeenth century because his father was the court physician of 'Abdu'l-Rahīm,⁴²⁶ is credited with five commentaries,⁴²⁷ written at the request of Mirzā Khān,⁴²⁸ as well as with a comprehensive work on medicine⁴²⁹ and a *Samnipātakalikā*.⁴³⁰

Works and authors quoted by Rudrabhaṭṭa in his commentary on the *Vaidyājīvana* are:⁴³¹ Amara, Amitaprabha (2.19), *Anekārtha* (1.70; 2.10), *Anekārthadhvanimañjarī* (4.1), *Ārogyacintāmaṇi* (4.24), *asmatkṛtāśārīṅgadharaṭīkā* (4.4), Bakula (4.21), Bheda (1.6), Bhoja (1.6), Bhṛgu (1.6), *Cakradatta* (3.40), Caraka, *Dhvanimañjarī* (1.73), *Kāmaśāstra* (1.61), *Mārkaṇḍeyapurāṇa* (1.2), *Nighaṇṭu* (1.18, 63, 69; 4.38), Ratnakalā (3.42), Ratnaprabhākara (1.29), Suśruta, Vāgbhaṭa, Vaṅgasena (1.63; 2.5; 4.31), Viśva, Vopadevapaṇḍita (3.40), and Vṛṇḍa (2.16).

(4) Sukhānandanātha,⁴³² pupil of paramahamsaparivrājakācārya Hariharānandanātha. His commentary, called *Lolimarājadīpikā*, was completed in 1863/64. The author may have been an inhabitant of Gujaraṭ, since he mentions some Gujaraṭī names of medicinal plants.⁴³³

Authorities and works quoted or referred to in the commentary are: Agniveśya (1.5), Amara (1.2, 3, 6, 33, 68; 3.16; 4.26), Bhāva (i.e., Bhāvamiśra; 3.34), Bhāvamiśra (1.62, 64, 75; 3.38), *Bhāvaprakāśa* (1.15, 38; 3.35, 38; 5.8, 20), *Bṛhadāraṇyaka* (5.20), Cakrapāṇidatta (1.26, 37, 46, 56, 59; 2.1, 4, 6; 3.18, 27, 37; 4.7, 12, 33), Cakrapāṇidattamiśra (3.38), Caraka (1.5, 10, 13, 46; 4.28), Divodāsa (5.21), Hārīta (1.5), Hemacandra (1.32, 57; 4.17; 5.20), Jaiyyaṭa (1.46), Kośa (1.11), *Kulārṇava* (5.20),⁴³⁴ Laṭakanasūnu (i.e., Bhāvamiśra: 2.8), Mādhava (4.36),⁴³⁵ Mādhavakāra (1.43–44, 76),⁴³⁶ Manu (5.20), Mārkaṇḍeya (1.2), *Matsyapurāṇa* (1.3), Medinīkāra (1.31, 41, 62, 66, 69, 70; 3.16), *Medinīkośa* (3.16), *Nighaṇṭu* (1.18; 2.10), *Nṛsiṃhapurāṇa* (2.20),⁴³⁷ *Sukhabodha* (5.20),⁴³⁸ Suśruta (1.5, 49; 4.28), Vāgbhaṭa (1.3, 5, 7, 8, 13, 49; 3.24), Vaṅgasena (1.59), Videha (1.75), *Viṣṇutilaka* (4.31),⁴³⁹ Viśva (1.1, 2, 6, 9),⁴⁴⁰ Yaska (5.20), and *Yogatantra*⁴⁴¹ (1.7).⁴⁴²

Sukhānanda's commentary contains a number of interesting explanations.⁴⁴³

(5) Bhagīratha,⁴⁴⁴ son of Harṣadeva of the Pīṭamuṇḍī family. Bhagīratha lived under Jagaccandra Kūrmācala; he called his commentary on the *Vaidyājīvana* *Jagacca-*

ndrikā,⁴⁴⁵ and that on Kālidāsa's *Raghuvamśa Jagaccandracandrikā*,⁴⁴⁶ in compliment to his patron.⁴⁴⁷

(6) Bhavānīśahāya.⁴⁴⁸ This author also wrote a commentary on the *Mādhavanidāna* and a *Yogacintāmaṇiṭippaṇa*.⁴⁴⁹

(7) Kṛṣṇapaṇḍita.⁴⁵⁰ A commentary called *Dīpikā*⁴⁵¹ is ascribed to Kṛṣṇapaṇḍita, son of Ammanapaṇḍita, who is referred to as śrīvijayapurādhīśa and vaidyapurandhara.⁴⁵² The introductory verse praises the author's father, Koneri, which indicates that it may be identical with Rudrabhaṭṭa's commentary.⁴⁵³

(8) Prayāgadatta. His commentary is called *Vijñānānandakarī*.⁴⁵⁴

(9) Tātā Sūryanārāyaṇa, son of Venkaṭeśvara; the commentary is called *Vidvadvaidyarañjanī*.⁴⁵⁵

(10) Sumatidhīra, a Jain monk of the Kharataragaccha. The commentary dates from 1784/85.⁴⁵⁶

(11) Cainesukha, a Jain monk of the Kharataragaccha. The commentary, written in Rājasthānī, dates from about 1763/64.⁴⁵⁷

An elaborate anonymous commentary is also recorded.⁴⁵⁸

The *Vaidyāvataṇṣa*⁴⁵⁹ is a short nighaṇṭu⁴⁶⁰ in 172 verses.⁴⁶¹ Unlike the *Camatkāracintāmaṇi* and the *Vaidyājīvana*, it is for the greater part written in simple Sanskrit.⁴⁶² It describes the medicinal properties of a series of dietetic substances and drugs,⁴⁶³ which are arranged as follows: fruits (4–21),⁴⁶⁴ vegetables (22–35), spices (36–50), various substances (51–108), grains and pulse (109–147), the flesh of some animals (148–150), dairy produce and the products of the sugarcane (151–169). Synonyms are given in a restricted number of instances, particularly in the verses dealing with various substances.⁴⁶⁵

Sources mentioned are Atritanaya (i.e., Ātreya), Caraka, Suśruta, and Vāgbhaṭa (2 and 170). Sources that may have been used, but not referred to by name are the *Dhānvarīya*-⁴⁶⁶ and *Rājjanighaṇṭu*.⁴⁶⁷

The *Vaidyāvataṇṣa* is quoted in the *Yogarātnākara*.⁴⁶⁸ It may also be quoted, as Lolimbarāja, in Śivadatta's commentary on his *Śivakoṣa*

Noteworthy names of plants are: ābhābbulikā (68), aśvalalā (36),⁴⁶⁹ babbūla (108), bhaṅgikā (66),⁴⁷⁰ brhacchatāhvā (38), cāruka (123),⁴⁷¹ ḍaṅgarī (79),⁴⁷² dhūmavṛkṣa (= tamākhū; 59), ḍikemālī (55),⁴⁷³ gurusa (125), hastigoṣā (26),⁴⁷⁴ junhala (= yāvanāla; 121), jūrṇākhyā (= yāvanāla; 121), khurasānapradeśajā yavānī (77),⁴⁷⁵ kolāmbikā (14), kṣupopodaka (74), kujavallī (= ḍikemālī; 55), makkā (= yāvanāla; 144), mehāri (107),⁴⁷⁶ mṛgākṣī (81),⁴⁷⁷ nartaka (136),⁴⁷⁸ tamākhū (59),⁴⁷⁹ and tīvrasāra (105).⁴⁸⁰ Most of these plants are not prescribed in the *Camatkāracintāmaṇi* and the *Vaidyājīvana*. Opium is absent from the *Vaidyāvataṇṣa*, although khākhasavalkala is employed as a medicinal substance in the *Camatkāracintāmaṇi* (5.16).

The *Vaidyakakāvya*⁴⁸¹ is a poem in ninety-five verses on the therapy of a number of diseases.⁴⁸² In contradistinction to most medical works, fever is the last disease dealt with. Some of the formulae closely resemble yogas found in the *Camatkāracintāmaṇi* or *Vaidyājīvana*, but the major part of them is new. The *Vaidyakakāvya* has not been

written in the form of a dialogue and the name of the poet's wife is not mentioned in it.

Lolimbarāja is mentioned as one of the sources of the *Amṛtasāgara*. Lolimbarāja is quoted in Lakṣmīdhara's *Cikitsāsamgraha*, Veṇīdatta's *Padyaveṇī*,⁴⁸³ the *Subhāṣitasārasamuccaya*,⁴⁸⁴ and Siddhicandra's *Sūktiratnākara*;⁴⁸⁵ he is referred to by the Marāṭhī saint Devadāsa.⁴⁸⁶ The *Harivilāsakāvya* of Lolimbarāja has influenced Rudrakavi in composing his *Rāṣṭraudhavaṇṣamahākāvya*,⁴⁸⁷ completed in A.D. 1596.⁴⁸⁸

The author

Lolimbarāja⁴⁸⁹ was a son of Divākara⁴⁹⁰ and a resident of the town Junara⁴⁹¹ in the Poona district of Mahārāṣṭra. He married the daughter of a Muslim sūbedār (governor of a province),⁴⁹² called Murāsā, whose name was changed into Ratnakalā after becoming his wife,⁴⁹³ and whose beauty, learning, etc., are eulogized in numerous verses of Lolimbarāja's works.⁴⁹⁴ Lolimbarāja was a courtier of one or more royal persons,⁴⁹⁵ as shown by epithets conferred upon himself⁴⁹⁶ and by references to a king called Hari, son of Sūrya,⁴⁹⁷ on whose request he composed the *Harivilāsakāvya*.⁴⁹⁸ This Hari may have been some minor ruler since no important king of this name is known from the period of Lolimbarāja's literary activity.⁴⁹⁹ After Ratnakalā's death, when the poet was about fifty years of age, he turned to an ascetic mode of life and became a sādhu.⁵⁰⁰

Lolimbarāja appears to have belonged to those Mahārāṣṭra brāhmaṇas who especially study the Mādhyaṛṇīna recension of the *Śuklayajurveda*.⁵⁰¹ He was especially devoted to the goddess Saptasṛṅgī,⁵⁰² who has a shrine on the slopes of the mountain Sahya in the Nāsik district.⁵⁰³

Lolimbarāja's fame as a poet appears from quotations in anthologies. That he was aware of his excellence in writing poetry is evident from a series of laudatory epithets found in his own works.⁵⁰⁴ He claims that he was not only an expert in poetry and medicine,⁵⁰⁵ but also in music.⁵⁰⁶

The chronological order of Lolimbarāja's works has been established by B. Tripāṭhī as follows:⁵⁰⁷ (1) *Vaidyāvataṃsa*, (2) *Vaidyajīvana*, (3) *Camatkāracintāmaṇi*, (4) *Vaidyakakāvya*, (5) *Ratnakalācarita*, (6) *Harivilāsakāvya*.

Date

Various suggestions have been put forward regarding the period in which Lolimbarāja lived and the dates of composition of his works. Some authorities are of the opinion that the author of the *Harivilāsa* was a contemporary of king Bhoja.⁵⁰⁸ The untenability of this view has been demonstrated by B. Tripāṭhī.⁵⁰⁹ The arguments brought forward by P.K. Gode⁵¹⁰ in trying to establish that the author of the *Harivilāsa* was different from and lived about thirty years earlier than the Lolimbarāja who composed the other works have also been invalidated by B. Tripāṭhī,⁵¹¹ thus proving that one and the same Lolimbarāja wrote the four medical works, the *Ratnakalācarita* and the *Harivilāsakāvya*. This Lolimbarāja is assigned to the period A.D. 1310–1370 by P. Hymavathi,⁵¹² to 1538–1608 by B. Tripāṭhī,⁵¹³ to 1578–1648 by L.R. Pāṅgārkar,⁵¹⁴ to about 1625 by P.V. Sharma,⁵¹⁵ and to the seventeenth century by V.L. Bhāve.⁵¹⁶

The exact period of his literary activity depends on the dates of MSS of his compositions and their reliability. Two MSS of the *Harivilāsakāvya*, preserved respectively in the Tanjore and BORI collections, are said to state that this work was composed in 1583/84.⁵¹⁷ The earliest dated MS of the *Vaidyājīvana* was completed in 1607/08;⁵¹⁸ a MS of this poem with the commentary of Jñānadeva alias Dāmodara was completed in 1612/13.⁵¹⁹

The period of Lolimbarāja's literary activity may therefore have been the last quarter of the sixteenth century if the evidence referred to is reliable. B. Tripāthī, being convinced that the style and structure of the *Harivilāsakāvya* prove it to be the most mature of Lolimbarāja's works, written when he may have been forty-five years of age, has concluded that he was born in 1538, but the onus of this assertion has to be left on this author. The proposed date of Lolimbarāja does not conflict with the chronology of authors quoting him or influenced by him.

Moreśvara

Moreśvara,⁵²⁰ son of the physician Māṇikyabhaṭṭa⁵²¹ or Māṇikabhaṭṭa,⁵²² and a resident of Aharṇmadanagara,⁵²³ wrote his *Vaidyāmṛta*⁵²⁴ in 1546/47.⁵²⁵

This work is a short therapeutic treatise of about 180 stanzas,⁵²⁶ divided into four chapters (alaṃkāra). The order of the diseases is for the greater part the same as in the *Mādhavanidāna*; prescriptions against pānātyaya, unmāda, hṛdroga, and mūtrāghāta appear to be absent;⁵²⁷ two recipes against jvarātisāra occur in the work (1.22–23); a pauṣṭika-, stambhana-, and drāvaṇayoga are added between the prescriptions against prameha and medoroga.

The author states that his therapy is partly based on his own experience, partly on that of his teacher, and partly again on medical treatises (4.21); recipes derived from his teacher are sometimes specified as such (1.28; 2.8); one recipe is said to be decidedly effective although not found in authoritative texts (1.22).⁵²⁸

Moreśvara's work contains mainly āyurvedic prescriptions, but he also included some rasayogas. The recitation (kīrtana) of the hymn in praise of Śtālādevī is said to cure visphoṭa and not, as usual, masūrī (3.37). The materia medica does not contain noteworthy substances, apart from isabagola (1.22)⁵²⁹ and ringaṇī (1.12).⁵³⁰ Once a disorder called jhañjhā (1.7)⁵³¹ is referred to.

Authorities mentioned are Ātreya, Pārāśara, Suśruta, and Vāgbhaṭa (1.1–2).

Moreśvara's *Vaidyāmṛta* is quoted in Hariprapanna's *Rasayogasāgara* and in the *Tāmbūlamanjari*.

Moreśvara's *Vaidyāmṛta* is said to be one of the sources of Raghunāthajī's *Nighaṇṭusaṃgraha*. A *Vaidyāmṛta*⁵³² is one of the sources of Raṅgajyotirvid's *Vicārasudhākara*.

Moreśvara is also credited with a *Nidānasiddhi*, which may have formed part of a larger work called *Cikitsāsāra*.⁵³³

A commentary on Moreśvara's *Vaidyāmṛta* was written by Jyotiṣvarūpa, pupil of Bhagavadbodhasvarūpa.⁵³⁴

Nāganātha

Nāganātha⁵³⁵ was the author of the *Nidānapradīpa*,⁵³⁶ a rather extensive textbook of pathology (nidāna), written in ślokas.⁵³⁷ Though sometimes regarded as a commentary on the *Mādhavanidāna*,⁵³⁸ it is an independent treatise.

Authorities and works quoted or referred to are: Agniveśa, *Aṣṭāṅgahṛdaya*, Bhaṭṭārakahariścandra, Bhoja, Cakra, Candrikākāraka, Caraka, Dṛḍhabala, Gadādhara, Gayadāsa, Guṇākara, Hariścandra, Hārīta, Īśāna, Jaijñāta, Jātukarmya, Kārttika, Khāraṇāda, Khāraṇādi, Kṣīrapāni, Mādhava, Nāgabhartar, Nāgārjuna, *Smṛtisamgraha*,⁵³⁹ Suśruta, Vāgbhaṭa, Vāpyacandra, Videha, Viśvaśa, *Vṛddhabhoja*, and *Vṛddhavāgbhaṭa*.

Nāganātha was the eldest son of Kṛṣṇabhaṭṭa,⁵⁴⁰ -paṇḍita, or -sūri and a descendant of a family of physicians. He was probably the elder brother and teacher of Nārāyaṇa, who wrote the *Jvaranirṇaya* and a commentary on Śārngadhara's *Triśatī*,⁵⁴¹ and also one of the teachers of Lakṣmaṇa, the author of the *Yogacandrikā*.⁵⁴² Since the *Triśatī* belongs to the fifteenth century, Nārāyaṇa and his brother Nāganātha cannot be earlier and may belong to the sixteenth century. The earliest MS of the *Nidānapradīpa* dates from 1684/85.⁵⁴³ P.V. Sharma⁵⁴⁴ suggested that Nāganātha may have been the great-grandfather of Koṇṛībhāṭṭa, the father of Rudrabhaṭṭa, the author of commentaries on the *Śārngadharasamhitā* and Lolimbarāja's *Vaidyajīvana*, but this would conflict with the date of Rudrabhaṭṭa, who lived about A.D. 1600.

Nārāyaṇa

Nārāyaṇa was the author of a remarkable and interesting monograph on fevers, called *Jvaranirṇaya*.⁵⁴⁵

Contents

The treatise consists of 405 verses,⁵⁴⁶ for the greater part ślokas, arranged in five chapters (prakaraṇa). It deals exclusively with the pathology of fevers, not with their treatment.

The opening verse is a maṅgala addressed to Gopāla, i.e., Kṛṣṇa. Chapter one (upodghātaprakaraṇa; forty verses) is about general principles of pathology and therapy. Chapter two (pṛthagjātaprakaraṇa; sixty-two verses) treats, as its title indicates, of fevers caused by one doṣa (44–51: anilajvara; 52–54: pittajvara; 55–56: kaphajvara).⁵⁴⁷ Apart from this, it is also concerned with fever in general, its nidāna, saṃprāpti, prodromes and symptoms (1–24), its number of types (25 and 32–35), and with irregular fevers (viśamajvara: 36–43). Chapter three (dvandvajaparakaraṇa; twenty-five verses) has fevers by two doṣas for its subject. The fourth and longest chapter (tridoṣajaparakaraṇa; 241 verses) is about fevers by three doṣas. It distinguishes and describes prakṛtisamasamaveta types (2–15)⁵⁴⁸ and numerous vikṛtivyāmasamaveta types. After enumerating the symptoms of saṃnipāta fever in general (41cd–47),⁵⁴⁹ and those of the fever called abhinyāsa or hataujas (48–51ab),⁵⁵⁰ a verse is inserted about the swelling at the root of the ear which appears towards the

end of a *saṃnipāta* fever (51cd–52ab),⁵⁵¹ whereupon the subject of *abhinyāsa* fever is continued, distinguishing several varieties of it (52cd–57ab). Then three series of thirteen *saṃnipāta* fevers of the *vikṛtviśamasamaveta* type are characterized: the first series (58–101ab) is said to be taken from the *Bhālukitantra*;⁵⁵² the second series (102–115) occurs, in a different order, in Śārṅgadharā's *Triśatī* (175–187);⁵⁵³ the third series (119–138ab) is also found in that text.⁵⁵⁴ Chapter four includes descriptions of the fevers called *madhara* (139cd–142), *pralepaka* (143–144),⁵⁵⁵ and *vātabalāsaka* (145),⁵⁵⁶ the *śītapūrva* and *dāhapūrva* fevers, etc. (148cd–160),⁵⁵⁷ the irregular fevers together with their *viparyaya* types and their symptoms when they are located in the seven *dhātus* of the body (161–226), *saumya* and *tikṣṇa* fevers (227–229), the stages of fever (230–236), and the signs of release from fever (237–241). Chapter five (*āgantujaprakaraṇa*; thirty-seven verses) deals with exogenous (*āgantū*) fevers (1–14), curability and incurability of fevers (15–17), and signs indicating the approach of death (18–33).

Sources indicated by the author are: *Bhāluki* (4.101 and 214), *Caraka*, (1.2; 5.37), *Jejjāta* (3.20; 4.176), *Khāraṇādi* (4.36–37),⁵⁵⁸ *Mādhava* (4.153), *muni* (i.e., *Vāgbhaṭa*; 4.197), *Nāgabhartar* (4.166), *ṛṣi* (i.e., *Vāgbhaṭa*; 1.33), *sāmpṛadāyikāḥ* (4.212), *Suśruta* (3.19; 4.36; 5.37), *tāntrikāḥ* (4.53), *tārkikāḥ* (2.21), *Vāgbhaṭa* (4.16, 41, 153), and *Vṛddhasuśruta* (4.102). The *Carakasamhitā*, *Suśrutasamhitā*, *Aṣṭāṅgahrdayasamhitā*, *Aṣṭāṅgasamgraha* and *Mādhavanidāna* were, however, utilized on a larger scale than appears from the above list.⁵⁵⁹ In a number of instances the author refers to his own view as opposed to that of others.⁵⁶⁰

Special features

The author distinguishes first the usual six types of irregular fever: *satata*, *prātyahika* (= *anyedyuṣka*), *ṛtīyaka*, *caturthaka*, *ṛtīyakaviparyaya* and *caturthakaviparyaya* (2.38–39), but describes later four *viparyaya* types: *satata*-, *anyedyuṣka*-, *ṛtīyaka*-, and *caturthakaviparyaya* (4.186–189).⁵⁶¹ Fevers by *vāta* are said to be of three varieties: *satata*, *śuddhasatata* and *śuddhaprātyahika* (2.42). Fevers by two *doṣas* may present the same three varieties, with the exception of the fever by *kapha* and *pitta* (3.14), because *vāta* is absent there. *Ṛtīyaka* and *caturthaka*, however, are never caused by two *doṣas*, but always by three (3.24). The distinction between *prakṛtisamasamaveta* and *vikṛtviśamasamaveta* fevers,⁵⁶² and that between *prākṛta* and *vaikṛta* types,⁵⁶³ have an important place throughout the work, as well as the periods of time during which a particular fever presents itself.⁵⁶⁴ The *madhara* fever, characterized by eruptions in the throat and on the chest, together with lassitude (*tandṛā*), and occurring in *Mahārāṣṭra*, is described as an example of those fevers which were omitted by the *ṛṣis* and *ācāryas* (4.138–142).⁵⁶⁵

The author

At the end of the work (5.36), the author mentions that his name is *Nārāyaṇa*, that his father instructed him in the *śāstras*, and that his brother was his preceptor in medicine. According to the colophon, the author's name is *Nārāyaṇa Paṇḍita* and his father's *Kṛṣṇa Paṇḍita*.⁵⁶⁶ These indications suffice to identify him as the younger brother of *Nā-*

ganātha, who wrote the *Nidānapradīpa*, and as one of the teachers of Lakṣmaṇa Paṇḍita, who composed the *Yogacandrikā*.⁵⁶⁷ Besides the *Jvaranirṇaya*, Nārāyaṇa wrote a commentary on Śārṅgadhara's *Triśatī*.

Date

Nārāyaṇa can be assigned to the sixteenth century, since he was the younger brother of Nāganātha and one of the teachers of Lakṣmaṇa Paṇḍita. This date is corroborated by his commentary on the *Triśatī*, because the latter work was written during the fifteenth century.

The *Rājanighaṇṭu* or *Nighaṇṭurāja*

The *Rājanighaṇṭu*⁵⁶⁸ or *Nighaṇṭurāja*,⁵⁶⁹ also called *Abhidhānacūḍāmaṇi*,⁵⁷⁰ is the largest extant lexicon of materia medica; it deals with the names and properties of medicinal substances, as well as with a series of related subjects.

Contents⁵⁷¹

The work consists of about 3,300 verses,⁵⁷² arranged in twenty-two chapters (*varga*), preceded by an introduction (*prastāvanā*; twenty-three verses), and followed by a section on *ekārthas* and *anekārthas* (258 verses). One of the introductory verses (3) contains a salutation addressed to Śiva, Brahmā, Indra, the Aśvins, Ātreya,⁵⁷³ Dhanvantari, Caraka, and Suśruta.

The author declares to have collected all those names of medicinal substances which are useful to a physician, regardless whether they are of Sanskrit, Prakrit, or Apabhraṃśa origin (10). He announces his intention to describe the drugs according to their traditional usage (*rūḍhi*), *svabhāva*, local names (*deśyukti*), special characteristics (*lāñchana*), names based upon similarities (*upamā*), *vīrya*, and names employed in foreign countries (*itarāhvaya*) (13). He adds that he has taken into consideration their names in the languages of Karṇāṭa and Mahārāṣṭra, and that he regards it as useful to know their names in the languages of Āndhra and Lāṭa⁵⁷⁴ (18). A short table of contents is found at the end of the introduction (20–21). The first chapters have no parallel in other *nighaṇṭus*.

Chapter one (*ānūpādivarga*; thirty-nine verses) is concerned with the characteristics of the various types of country (*deśa*) and soil (*kṣetra*), the deities presiding over the types of soil, the characteristics and uses of trees and other kinds of plants and their products as dependent on the type of soil they are growing on, the definitions of the five classes of plants, the characteristics of plants considered to be of the male, female or neuter gender, and the relationship between parts of plants and the five *mahābhūtas*. Chapter two (*dharanyādivarga*; seventy-one verses) deals with synonyms for earth, mountain, forest, etc.; it also contains a list of *nakṣatравṛkṣas*.⁵⁷⁵

Chapters three to thirteen contain enumerations of the names and properties of medicinal substances, arranged in the following groups: *guḍūcyādi*-,⁵⁷⁶ *śatāhvādi*-,⁵⁷⁷ *parpatādi*-,⁵⁷⁸ *pippalyādi*-,⁵⁷⁹ *mūlakādi*-,⁵⁸⁰ *śālmalyādi*-,⁵⁸¹ *prabhadrādi*-,⁵⁸² *karavīrādi*-,⁵⁸³ *āmṛādi*-,⁵⁸⁴ *candanādi*-,⁵⁸⁵ and *suvarṇādivarga*.⁵⁸⁶

Chapters fourteen to seventeen are about articles of food: water, the sugarcane and its products, types of sugar derived from other plants than the sugarcane, honey, and alcoholic drinks (chapter fourteen: *pāṇiyādivarga*); milk and other dairy produce, *kāñjika* and similar products of acid fermentation, urines and oils (chapter fifteen: *kṣīrādivarga*); grain and pulse (chapter sixteen: *śālyādivarga*); meat (chapter seventeen: *māṃsādivarga*).

Chapter eighteen (*manuṣyādivarga*) is about names of human beings, anatomical terms, and some related subjects, chapter nineteen (*siṃhādivarga*) about the names of animals, chapter twenty (*rogādivarga*) about the names of diseases, about medicinal preparations, the tastes and their combinations, etc., chapter twenty-one (*sattvādivarga*) about the three *guṇas* and the character of human beings dominated by one of these, the three *doṣas* and the constitutions, weights and measures, divisions of time, the quarters of the sky, etc., and chapter twenty-two (*miśrakādivarga*) about groups of medicinal substances.

The work ends with *ekārthas* and *anekārthas*, the latter being divided into groups of names having two up to eleven meanings. These lists of *ekārthas* and *anekārthas* pose a number of problems since some of the *ekārthas* have more than one meaning in the *Nighaṇṭu*,⁵⁸⁷ while, moreover, some synonyms figuring in these lists are not found there.⁵⁸⁸

The style of the *Rājanighaṇṭu*, especially that of the *prastāvanā* and the concluding verses of each *varga*, is rather ornate. The arrangement of the medicinal substances differs considerably from that found in the *Dhanvantarīyanighaṇṭu*, apart from the contents of a few *vargas*, notably the *śātāhvādi-* and *candanādivarga*. The strings of synonyms, usually longer than those of the *Dhanvantarīyanighaṇṭu*, are rarely identical with those of the latter work,⁵⁸⁹ whereas the verses describing the properties of drugs more often are.⁵⁹⁰ A conspicuous feature is the mention of the number of synonyms at the end of each series.

The *Rājanighaṇṭu* describes more medicinal substances than the *Dhanvantarīyanighaṇṭu*⁵⁹¹ and distinguishes a larger number of varieties. On the other hand, a small number of drugs included in the *Dhanvantarīyanighaṇṭu* are absent from the *Rājanighaṇṭu*, e.g., *śvāsāri* (*Dhanvantarīyanighaṇṭu* 1.72), *kapaṭa* (1.82–83), *guṇṭha* (1.83–84), *kāsaghñī* (1.98–100), *viṣayā* (1.130–131), *śvetapuṣpī* (1.252–253), the varieties of *yavānī* (2.93–94), *girisindūra* (3.103–104), *vaṭasaugandhika* (3.114–115), *jalapippalī* (4.64–65), and *kiṅkirāta* (5.156–158). The compilatory character of the *Rājanighaṇṭu* is, in the same way as in the *Dhanvantarīyanighaṇṭu*, apparent from quotations,⁵⁹² which are, however, less frequent than in the latter work.

Sources mentioned by the author of the *Rājanighaṇṭu* in the introductory verses are: the *Dhanvantarīyanighaṇṭu*, the works of Madana⁵⁹³ and Halāyudha,⁵⁹⁴ the *Viśvaprakāśa*,⁵⁹⁵ the *Amarakoṣa*, and the *Śeṣarāja*.⁵⁹⁶ He states explicitly that Dhanvantari's treatise is his chief authority and model. Some more works referred to are *Bṛhatsuśruta*, *Nāradya(tanṭra)*, and *Nārāyaṇī*.⁵⁹⁷

The *Rājanighaṇṭu* is quoted or referred to in Ambikādatṭaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, Bhānuji Dīkṣita's commentary on the *Amarakoṣa*,⁵⁹⁸ the *Bṛhannighaṇṭuratanāka-*

ra,⁵⁹⁹ Cūḍāmaṇimīśra's *Rasakāmadhenu*, Gulrājśarmamīśra's commentary on the *Āyurvedaprakāśa*,⁶⁰⁰ Hārāṇacandra's commentary on the *Suśrutasaṃhitā*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Indu's *Śaśilekhā* on the *Aṣṭāṅgasaṃgraha*,⁶⁰¹ Jīvānandavidyāsāgara's commentaries on Gopālakṛṣṇa's *Rasendrasārasaṃgraha* and Kaṇāda's *Nāḍivijñāna*, Khare's commentary on the *Rasaratnasamuccaya*, Lakṣmīrāma's commentary on the *Siddhabhṛṣajamaṇimālā*, Mādhava's *Āyurvedaprakāśa*, the *Pārāśaraṣaṃhitā*, Raghunātha's *Bhōjanakutūhala*,⁶⁰² the *Sāligṛāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratanākara*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,⁶⁰³ Priyavrat Śarmā's auto-commentary on his *Dravyaguṇasūtra*, Śivadattamīśra's commentary on his *Śivakoṣa*,⁶⁰⁴ the *Tāmbūlamanjari*, the *Smṛtyarthasāgara*,⁶⁰⁵ Yādavjī Trikamjī's *Rasamṛta*, the *Yogaratanākara*,⁶⁰⁶ and Yogīndranāthasena's commentary on the *Carakasaṃhitā*.⁶⁰⁷ It is quoted as *Abdhīhānacūḍāmaṇi* in Kṛṣṇadatta's commentary on Trimalla's *Śataśloki*.

Naraharipaṇḍita is quoted in Priyavrat Śarmā's auto-commentary on his *Dravyaguṇasūtra*. Narahari is mentioned in Śailendrasīṃha's *Vaidyacintāmaṇibhaiṣajyasamgrahaya*.

Special features

The number of medicinal substances described in the *Rājanighaṇṭu* and absent from the *Dhanvantarīyanighaṇṭu* is too large to be enumerated.

Some of the more interesting new plants added are: *agnidamanī* (śatāhvādi 59–61),⁶⁰⁸ *āhulya* (śatāhvādi 167–168),⁶⁰⁹ *aparvadaṇḍa* (śālmalyādi 77–78),⁶¹⁰ *asiśimbī* (mūlakādi 183–184),⁶¹¹ *aśvakātharā* (parpaṭādi 114–115),⁶¹² *bheṇḍā* (śatāhvādi 26),⁶¹³ *bhr̥ṅgāhvā* (mūlakādi 47),⁶¹⁴ *brahmadanḍī* (parpaṭādi 133),⁶¹⁵ *caṇikā* (śālmalyādi 147),⁶¹⁶ *dharāṇīkanda* (mūlakādi 91–92),⁶¹⁷ *dhūmrapatrā* (parpaṭādi 34–35),⁶¹⁸ *ekavīra* (śālmalyādi 17–18),⁶¹⁹ *gaṅgāpatrī* (karavīrādi 162),⁶²⁰ *gomūtrikā* (śālmalyādi 128),⁶²¹ *gorakṣadugdhi* (parpaṭādi 142–143),⁶²² *gorakṣī* (parpaṭādi 94–95),⁶²³ *guṇḍāsini* (śālmalyādi 148–149),⁶²⁴ *hastikanda* (mūlakādi 80–82),⁶²⁵ *hastiśuṇḍī* (parpaṭādi 77),⁶²⁶ *hemā* (guḍūcyādi 42–44),⁶²⁷ *himāvalī* (pippalyādi 245–246),⁶²⁸ *jambū* (parpaṭādi 84–85),⁶²⁹ *jaraṇadruma* (prabhadrādi 81–82),⁶³⁰ *jhaṇḍū* (parpaṭādi 141),⁶³¹ *jhiṇjhirīṇā* (śatāhvādi 201–202),⁶³² *kaivartikā* (guḍūcyādi 119–120),⁶³³ *kāmavṛddhi* (śatāhvādi 196–197),⁶³⁴ *kaṇṭhapunkhā* (śatāhvādi 74),⁶³⁵ *karajodī* (mūlakādi 121),⁶³⁶ *kārī* (śālmalyādi 64–65),⁶³⁷ *karnasphoṭā* (guḍūcyādi 136–137),⁶³⁸ *karuṇī* (karavīrādi 105–106),⁶³⁹ *kaṭvī* (guḍūcyādi 138–139),⁶⁴⁰ *kevikā* (karavīrādi 115–116),⁶⁴¹ *kolakanda* (mūlakādi 83–84),⁶⁴² *kurī* (śālyādi 138),⁶⁴³ *kuṭumbinī* (parpaṭādi 78–80),⁶⁴⁴ *mahāpiṇḍī* (prabhadrādi 140–141),⁶⁴⁵ *majjara* (śālmalyādi 133),⁶⁴⁶ *mākandī* (mūlakādi 42–43),⁶⁴⁷ *mālākanda* (mūlakādi 97–98),⁶⁴⁸ *manthānaka* (śālmalyādi 136),⁶⁴⁹ *māyāphala* (pippalyādi 259),⁶⁵⁰ *mudgara* (karavīrādi 77–78),⁶⁵¹ *nakhaniśpāvikā* (mūlakādi 192),⁶⁵² *nīlśreṇikā* (śālmalyādi 130),⁶⁵³ *nīlāmlī* (śatāhvādi 176),⁶⁵⁴ *pācī* (karavīrādi 163–164),⁶⁵⁵ *pakvāṇḍa* (śālmalyādi 43),⁶⁵⁶ *pallivāha* (śālmalyādi 137),⁶⁵⁷ *panyāndhā* (śālmalyādi 139–141),⁶⁵⁸ *peū* (mūlakādi 48),⁶⁵⁹ *putradā* (śatāhvādi 159–160),⁶⁶⁰ *putradātrī* (guḍūcyādi 142–143),⁶⁶¹ *sākuruṇḍa* (pippalyādi 243–244),⁶⁶² *samudraphala* (pippalyādi 216–217),⁶⁶³ *sarpinī* (parpaṭādi 125),⁶⁶⁴ *śaśaṇḍulī* (mūlakādi 217–218),⁶⁶⁵ *śilpikā* (śālmalyādi 129),⁶⁶⁶ *śimṛḍī* (śatāhvādi 164–

165),⁶⁶⁷ śolī (mūlakādi 44),⁶⁶⁸ śrītāla (prabhadrādi 95–96),⁶⁶⁹ śrīvallī (śālmalyādi 74–75),⁶⁷⁰ śūlī (śālmalyādi 150–151),⁶⁷¹ svarṇulī (śatāhvādi 162),⁶⁷² śvetā (parpaṭādi 132),⁶⁷³ śvetāmlī (śatāhvādi 175),⁶⁷⁴ tairiṇī (śatāhvādi 127),⁶⁷⁵ takrāhvā (śatāhvādi 161),⁶⁷⁶ taratī (śālmalyādi 73),⁶⁷⁷ ukhala (śālmalyādi 125),⁶⁷⁸ uṣṭrakāṇḍī (karavīrādi 139–140),⁶⁷⁹ viṣṇukanda (mūlakādi 89–90),⁶⁸⁰ and vṛścikā (parpaṭādi 126).⁶⁸¹

New varieties, added by the author of the *Rājanighaṇṭu* to those described in the *Dhanvantarīyanighaṇṭu*, are also rather numerous. Some of these are: ari (a variety of khadira; śālmalyādi 30),⁶⁸² bhūtumbī (a variety of alāmbunī; mūlakādi 167–168),⁶⁸³ brhājīvantī (a variety of jīvantī; guḍūcyādi 40–41),⁶⁸⁴ catuṣpatrī (a variety of pāṣāṇabhedaka; parpaṭādi 45–46),⁶⁸⁵ cīṇākarkaṭikā (a variety of trapusa; mūlakādi 213–214),⁶⁸⁶ gorakṣatumbī (a variety of alāmbunī; mūlakādi 162–163),⁶⁸⁷ kaiḍārya (a variety of nimba; prabhadrādi 13–14),⁶⁸⁸ kaliṅga (a variety of trapusa; mūlakādi 169–170),⁶⁸⁹ karkaṭa (a variety of vayasthā; āmrādi 198–199),⁶⁹⁰ karkaṭī (a variety of trapusa; mūlakādi 202–204),⁶⁹¹ kāṣṭhadhātī (a variety of vayasthā; āmrādi 160–161),⁶⁹² kṣīratumbī (a variety of alāmbunī; mūlakādi 164–166),⁶⁹³ mahānīlī (a variety of nīlī; śatāhvādi 84–85),⁶⁹⁴ mṛgākṣī (a variety of trapusa; mūlakādi 178–180),⁶⁹⁵ nilapunarṇavā (a variety of punarṇavā; parpaṭādi 121–122),⁶⁹⁶ sarpatanu (a variety of brhatī; śatāhvādi 26–27),⁶⁹⁷ śilāvalkā (a variety of pāṣāṇabhedaka; parpaṭādi 43–44),⁶⁹⁸ śvetabrhatī (a variety of brhatī; śatāhvādi 28–29),⁶⁹⁹ tāmrakaṇṭaka (a variety of khadira; śālmalyādi 26–27),⁷⁰⁰ vaṭapatrī (a variety of pāṣāṇabhedaka; parpaṭādi 41–42),⁷⁰¹ and viṭkhadira (a variety of khadira; śālmalyādi 28–29).⁷⁰²

Chapter nineteen is about the names and their synonyms of forty-eight animals. Interesting among these are, for example: brāhmaṇī (8),⁷⁰³ jāhaka (10),⁷⁰⁴ karṇajalūkā (13),⁷⁰⁵ kūṭikā (46),⁷⁰⁶ kokaḍa (5),⁷⁰⁷ maṅkora (47), matkuṇa (17),⁷⁰⁸ pakṣmayūkā (44),⁷⁰⁹ pallī (11),⁷¹⁰ three kinds of pipḷikā (14–16),⁷¹¹ ṣaḍbindukīṭa (48), śvetayūkā (45),⁷¹² tailakīṭa (39), and yūkā (43).⁷¹³

Chapter twenty mentions two series of the eight divisions (aṣṭāṅga) of āyurveda: (1) dravyābhīdhāna, gadaniścaya, kāya, saukhya, śalyādi, bhūtanigraha, viṣanigraha, bālavaidya (20.42); (2) śalya, śālākya, kāya, bhūta, viṣa, hāla, rasāyana, vṛṣya (20.43). Noteworthy names of disorders from the same chapter are, for example: hr̥dgranthi = hr̥dvraṇa (24), jātharagranthi = gulma (10), kṣudrasphoṭa = kañcikā (7), lūtā = carmavraṇa = vṛkka (11), pītasphoṭa = pāmā (7), pramīlā = tandrā (28), pr̥ṣṭhagranthi = gaḍu (10), śākhāpitta (27), sacivāmaya = visarpa (3), śikhin = śvāsa (6), sūkṣmasphoṭa = vicarcikā (7), śuṇṭhikāsphoṭa = saṃcārī (7), tunda = sthaviṣṭha (22), udanyā = tr̥ṣṇā (17), utprāṇa = śvāsa (14).

Chapter twenty-two enumerates three groups of lohas (metals): the three lohas: suvarṇa (gold), rajata (silver), tāmrā (copper) (22.11); the five lohas: the three lohas, to which vaṅga (tin) and nāga (lead) are added (22.11); the eight lohas: the five lohas, to which kānta, muṇḍaka and tīkṣṇaka (varieties of iron) are added (22.14). The eight mahārasas are: darada, pārada, sasya, vaikrānta, kānta, abhṛaka, mākṣika, and vimāla (22.15). The eight uparasas are: khecara, añjana, karkuṣṭha, gandha, āla, gairika, kṣiti, and śaileyāñjana (22.16). The sāmānyarasas (= sādharmaṇarasas) are: kampilla, gaurī, capala, kaparda, śaila, sindūraka, vahnijāra, and bodaraśṛṅga (22.17). The ten kinds of kṣāra derive from śigru, mūlaka, palāśa, cukrikā, citraka, ārdraka, nimba, ikṣu,

śaikharika,⁷¹⁴ and mocikā (22.18).

The author

The author introduces himself as Narahari, Narasiṃha, Nṛhari and Nṛsiṃha,⁷¹⁵ son of Īśvara.⁷¹⁶ He was a resident of Kaśmīr,⁷¹⁷ of royal blood,⁷¹⁸ and took part in warlike activities.⁷¹⁹ His favourite deities were Śiva and Pārvatī.⁷²⁰ Additional, but questionable,⁷²¹ information is found in the colophons of some MSS.⁷²² This information is as follows: Narahari was the son of Īśvarasūri,⁷²³ a physician who was also called Caṇḍeśvara,⁷²⁴ and the disciple of Amṛteśānanda⁷²⁵ who belonged to the śiṣyaparamparā of Somānanda;⁷²⁶ he was a resident of Siṃhapura in Kaśmīr.⁷²⁷

Narahari is sometimes credited with two more medical works, the *Guṇasārasamuccaya* and the *Vāgbhaṭamaṇḍana*.⁷²⁸ The latter is by a different Narahari.⁷²⁹

Date

The terminus post quem of the *Rājanighaṇṭu* can be deduced from the sources mentioned by the author. The latest of these sources being the *Madanapālanighaṇṭu*, composed in 1375, the *Rājanighaṇṭu* cannot be earlier than the fifteenth century.⁷³⁰ The terminus ante quem is provided by quotations in two works dating from the seventeenth century, Bhānuji Dīkṣita's commentary on the *Amarakoṣa* (first half of the seventeenth century)⁷³¹ and Raghunātha's *Bhojanakutūhala*.

The evidence collected by P.V. Sharma⁷³² in order to establish that the *Rājanighaṇṭu* is posterior to the *Bhāvaprakāśanighaṇṭu* and may date from the seventeenth century is invalid in my view. His first argument, the description of the plant called pīṭakaravīra⁷³³ by the author of the *Rājanighaṇṭu* (karavīrādi 16), while the plant is absent from Bhāvamiśra's work, can be discarded because this plant was already known to Kaiyadeva.⁷³⁴ His second argument, the presence of kulañja(na)⁷³⁵ in the *Rājanighaṇṭu* (pippalyādi 55), known as ugragandhā sugandhā to Bhāvamiśra (harīṭakyādivarga 105), does not carry much weight, since kuliñja(na), a synonym of kulañja(na), was already prescribed by Śāriṅgadhara in his *Triśaṭī* (168) and Soḍhala in his *Gadanigraha* (leḥādhikāra 342).⁷³⁶ His third argument, the presence in the *Rājanighaṇṭu* of a series of drugs, such as kālāñjanī (śatāhvādi 186–187),⁷³⁷ kāmavṛddhi (śatāhvādi 196–197), karpūrataila (kṣīrādi 125) and sarvakṣāra (pippalyādi 257–258), whereas these are not described in the *Bhāvaprakāśanighaṇṭu*, is inconclusive, because the *Rājanighaṇṭu* contains a large number of medicinal substances which are not found in any other nighaṇṭu. His fourth argument, the description of jhaṇḍū (parpatādi 141),⁷³⁸ may be important as a clue to the date of the *Rājanighaṇṭu*, provided that P.V. Sharma is right in his identification and his claim that it was introduced into India at the end of the sixteenth century.⁷³⁹ The same applies to the plant called himāvali (pippalyādi 245–246), but only if it is actually the same as the dvīpāntaravacā of the *Bhāvaprakāśanighaṇṭu* (harīṭakyādivarga 107–108), i.e., cobacīnī or sarsaparilla, as suggested by P.V. Sharma.⁷⁴⁰

P. Hymavathi⁷⁴¹ developed his own views regarding the date of the author of the *Rājanighaṇṭu*, basing himself on the (erroneous) conviction that he was a disciple of Śrīkaṇṭhapaṇḍita, the śuddha Śaiva and medical author. He asserts that Narahari

or Narasiṃha hailed from a brāhmaṇa family adhering to the Kaśmīr school of Śaivism, which was introduced in the southern part of India after the establishment of Mohammedan rule in the North.⁷⁴² The date of Śrīkaṇṭha (A.D. 1300-1360) and the fact that the *Rājanighaṇṭu* is later than the *Madanapālanighaṇṭu* made him conclude that the former work must have been written shortly after the latter, towards the end of the fourteenth century. P. Hymavathi identifies Narahari's patron as Narasiṃha IV, who ruled in Kāliṅga between A.D. 1378 and 1409.

The evidence available, however, points to the fifteenth or sixteenth century as the period of composition of the *Rājanighaṇṭu*. The identity of jhaṇḍū and himāvalī, and the date of their introduction into India, may prove to be clues enabling us to narrow the limits.

Narasiṃhaśāstrin

Narasiṃhaśāstrin wrote, probably in the period A.D. 1500-1570, the *Vaidyasārasaṃgraha*.⁷⁴³ The work begins with nāḍī- and mūtraparīkṣā.⁷⁴⁴

Nayanasukha

Nayanasukha, a Jaina monk, son of Keśavadāsa,⁷⁴⁵ wrote a *Vaidyamanotsava* in Hindī verse.⁷⁴⁶ This treatise, consisting of about 320 verses, arranged in seven chapters, is said to have been influenced by Lolimbarāja's *Vaidyājīvaṇa*.⁷⁴⁷ It is referred to as a source in Vidyāpati's *Cikitsāñjana*.

The *Vaidyamanotsava* was completed at Sīhananda or Siṃhacanda in A.D. 1592, as indicated by the author himself.⁷⁴⁸

The *Paraśurāmapratāpa*

The *Paraśurāmapratāpa*,⁷⁴⁹ a huge work of an encyclopaedic character on dharmaśāstra in sixteen sections (kāṇḍa), contains some matter of medical interest. The āhnikakāṇḍa gives a long extract, called pākādhyāya, from a work on pākāśāstra ascribed to Suśeṇa,⁷⁵⁰ some information on aphrodisiac medicines, and a detailed account of manufacturing various scents. The saṃskārakāṇḍa contains the whole of the first part of the *Śiśurakṣāratna* by Pṛthvīmalla, and the text of a treatise called *Bālarakṣā* or *Bālarakṣikā* by Karuṇāprāṇanātha.⁷⁵¹

The authorship of the *Paraśurāmapratāpa* is ascribed to Pratāpanṛpati or -rāja, one of the sons of Padmanābhi, son of Lakṣmīdhara. Pratāparāja, who was a devotee of Paraśurāma, was patronized by Nizām Shāh of Ahmadnagar, identified as Burhān Nizām Shāh (A.D. 1509-1553)⁷⁵² of the Nizām Shāhī dynasty by P.K. Gode, who places Pratāparāja between 1531 and 1550.⁷⁵³ The real author of the work under discussion was probably Kūrmasūri, the teacher of Pratāparāja. This Kūrmasūri must have been a scholar of wide learning, as is apparent from the large number of works from which he quotes. Interesting from a medical point of view are the quotations from *Haramekhalā*, Śālihotra, Śārṅga(dhara), and *Vṛddhavāgbhaṭa*.

Pratāparudradeva

Pratāparudradeva was the author of the *Kautukacintāmaṇi*, a work in 1,656 verses, arranged in three sections (dīpti), on different subjects, including magic.⁷⁵⁴

Some of the subjects are: ātmaśarīrarakṣā,⁷⁵⁵ drṣṭibandha, khaḍgastambhana,⁷⁵⁶ agnistambhana, annapākastambhana, gṛhadāhastambhana,⁷⁵⁷ jalastambhana, vayovī-ryādīstambhana, (rāja-, strī-, pati-, gṛjādi)vaśīkaraṇa,⁷⁵⁸ kṛtrimavastukaraṇa⁷⁵⁹ (mu-ktā-, padmarāga-, indranīlakaraṇa, etc., karpūrakaraṇa, etc.).⁷⁶⁰

The section on royal entertainments (vinoda) contains formulae for the preparation of various kinds of fireworks.⁷⁶¹

A *Kautukacintāmaṇi* is one of the sources of Basava's *Śivatattvaratnākara*.

The treatise dates from about 1520.⁷⁶²

Pratāparudra, the king of Orissa who was renowned as a patron of Sanskrit literature, is credited with the *Kautukacintāmaṇi*. This king of the Gajapati dynasty, who was a contemporary of Caitanya and was greatly influenced by his teaching, ruled from A.D. 1497 to 1539.⁷⁶³

Rāmakṛṣṇa Vaidyārāja

Rāmakṛṣṇa Vaidyārāja wrote a *Kanakasiṃhaprakāśa* under the patronage of Kanaka-siṃha of Bagesara in Bihār, a descendant of Jaitrasīṃha of the Gauravaṃśa.⁷⁶⁴ The work dates from the sixteenth century.⁷⁶⁵

Sādhukīrti

Sādhukīrti, a pupil of Jinasāgara of the Kharataragaccha, was the author of the *Śe-ṣaṣaṃgrahanāmamālā*, a supplement in about 1,500 ślokas to Hemacandra's *Abhidhā-nacintāmaṇi*. The bulk of the work is devoted to the names of trees, shrubs, etc.⁷⁶⁶

Sajjana

Sajjana wrote in 1585 the *Sūktāmṛtapunaruktopadaṃśadaśana*, a very brief treatise on medicine in forty-five verses, preceded by two introductory and nine preliminary verses. The author's name and the title of the work are mentioned at the end. An alternative title is *Vaidyavidyāvilāsa*.⁷⁶⁷

Śrīśailanātha

Śrīśailanātha, son of Avadhānasarasvatī, grandson and pupil of Kāmeśanātha, great-grandson of Ekāmranātha, wrote his *Prasnottararatnamālā*⁷⁶⁸ under the patronage of Veṅkaṭādrivibhu,⁷⁶⁹ a king of the Vijayanagar empire. If this king is Veṅkaṭādri or Veṅkaṭa I, who was the son of Acyuta Rāya, and who, after the death of his father in 1541 or 1542, ascended the throne and reigned for about six months only,⁷⁷⁰ Śrīśailanātha belongs to the sixteenth century.⁷⁷¹

The *Prāsnottararatnamālā* is quoted in Caturbhūja's commentary on the *Rasahṛdayatantra*.

Śubhacandra

Śubhacandra was the author of the *Jīvakacarita*⁷⁷² or *-tantra*, dealing with the life of Jīvaka, the famous physician of Buddhist literature. The work is assigned to the sixteenth century.⁷⁷³ It is referred to in another work of the same author, the *Bṛhatpāṇḍavapurāṇa*.⁷⁷⁴

Ṭoḍaramalla

Ṭoḍaramalla, Akbar's finance minister, engaged a number of scholars of Benares to compile an encyclopaedic work. This huge encyclopaedia, the *Ṭoḍarānanda*, consists of twenty-two sections (*saukhya*),⁷⁷⁵ the last of which, the *Āyurvedasaukhya*,⁷⁷⁶ is concerned with medicine.

Contents

The *Āyurvedasaukhya* is arranged in ninety-seven chapters (*harṣa*).⁷⁷⁷ Their order has been re-arranged in the edition.

Volume I contains the larger part of chapter eight⁷⁷⁸ (chapters 1–29 of the edition), chapter twelve (chapter 30 of the edition), and chapters eighty-four to ninety-one (chapters 31–38 of the edition), all dealing with *materia medica*.

The subjects of volume I are: (1) the basic concepts of pharmacology (*rasa*, *guṇa*, *vīrya*, *vipāka*, *prabhāva*); (2) the medicinal properties of drugs (metals, minerals and gems included); (3) salts and caustics; (4) the sugarcane and its products; (5) honey; (6–9) milk and other dairy produce; (10) oils; (11) alcoholic drinks; (12) vinegar (*śukta*); (13) urine; (14) water; (15–16) grain and pulse; (17) meat; (18) fish; (19) fruits; (20) vegetables; (21) the best (*śreṣṭha*) among various articles of diet; (22) the properties and actions of the six tastes; (23–27) prepared foods; (28) *anupāna*; (29) substitutes for drugs (*anukalya*); (30) groups of drugs (*gaṇodeśa*); (31–35) synonyms of drugs (*abhayādi*), spices (*supādika*), fragrant substances (*karpūrādi*), metals, minerals, gems, etc. (*suvarṇādi*), and trees (*vanaspativarga*); (36) names and properties of fruits (*phalavarga*); (37) names of vegetables and their synonyms (*śākavarga*); (38) names and properties of prepared foods.

These chapters on *materia medica* have rather carelessly been compiled⁷⁷⁹ from various sources without making them into a coherent whole. This explains that (a) subjects have been dealt with twice,⁷⁸⁰ (b) two separate chapters are devoted to various fruits⁷⁸¹ and prepared foods,⁷⁸² (c) properties of drugs are described while the synonyms of these drugs have been omitted,⁷⁸³ (d) synonyms are given of substances which are absent from the chapters which are concerned with the medicinal properties of drugs,⁷⁸⁴ and (e) the order of the drugs dealt with in chapter two does not agree at all with that of the synonyms in chapters thirty-one to thirty-four.

In contrast with other parts of the *Āyurvedasaukhya*, the chapters on *materia*

medica contain few references to the sources. Those mentioned in the text are:⁷⁸⁵ *Ārogyacintāmaṇi* (30.44–48),⁷⁸⁶ Caraka, (Tīsaṭa's) *Cikitsākalikā* (30.96), Dhūrjati (30.107–108), *Dravyaguṇaratnamālā* (1.5),⁷⁸⁷ Jayyāta (6.36), Kṛṣṇātreya (30.151–152), Parāśara (2.44), Suśruta, Vāgbhaṭa, and *Vṛddhasuśruta* (14.58–60). A major source, the *Mādhavadravyaguṇa*,⁷⁸⁸ was, however, left unmentioned. The many verses, common to the chapters on materia medica of the *Āyurvedasaukhya* and the *Bhāvaprakāśanighaṇṭu*,⁷⁸⁹ can be seen as a result of borrowing,⁷⁹⁰ indebtedness to a common source, or the collaboration of Bhāvamīśra in the compilation of the *Āyurvedasaukhya*.⁷⁹¹ The verses which are also found in the *Āyurvedaprakāśa*⁷⁹² derive from a common source or have been borrowed from the *Āyurvedasaukhya* since the latter is anterior to the former.

A major source that went unnoticed so far is the *Madanapālānighaṇṭu*, put to use extensively in chapters 31–38, while verses common to *Āyurvedasaukhya* and *Soḍhalānighaṇṭu* are found in chapter twenty.⁷⁹³ Almost the whole of chapter twenty-nine on substitutes is strikingly similar to the verses on this subject in Vaṅgasena's *Cikitsāsārasaṃgraha* (dravyaguṇādhikāra 65–88). Finally, Cakrapāṇi-datta's *Dravyaguṇasaṃgraha* may also have been utilized by the compilers of the *Āyurvedasaukhya*.⁷⁹⁴

Volume II contains the first six chapters of the *Āyurvedasaukhya*, which are concerned with the basic principles of āyurveda and allied topics. After some introductory verses (1–8), chapter one deals with the aims of āyurveda and its definition (9–13ab), the eight branches of āyurveda (13cd–40), the four limbs of treatment (41–45), the characteristics of a physician (48–92), the various kinds of diseases (93–126), the modes of examination of a patient (127–149), and the classification of diseases (150–168). Chapter two is about the doṣas (2–132), decrease of the tissues (dhātu), impurities (mala), etc. (133–163), remedial measures in general (164–174), the types of country and soil (175–202), and the constitutions, together with the character types (203–229). Chapter three is concerned with the five elements (mahābhūta) and the mahābhautika composition of drugs (2–20ab), various types of drug action (20cd–65), the tastes (66–80), vīrya (81–87), guṇa (88–93), vipāka (94–109), prabhāva (110–115), the divisions of time and the regimen for the various seasons (116–235), pollution of land, water and air (236–250), epidemic diseases (251–261), the regimen for day and night (262–355), and the examination of the age, strength, and sātmya of a patient (356–411). Chapter four treats of the fires in the human body, the digestive processes (10–40), the tissues (dhātu) and their metabolism (41–62), the physiology of the generative organs, conception, embryology, pregnancy, and allied subjects (63–221), anatomy (222–295), the marmanas (296–346), death, health, and general lines of treatment (347–361). Chapter five is devoted to prognostics (omina, aśṛtas, dreams, etc.). The subjects of chapter six are the examination of the pulse (2–25), urine (26–69), faeces (70–86), eyes (87–94), tongue (95–101), teeth (102–108), and the prediction of the date of death (120–160).

Sources and authorities referred to are: Agniveśa,⁷⁹⁵ Ātreya,⁷⁹⁶ Atri,⁷⁹⁷ Aupadhenava,⁷⁹⁸ Bhāluki,⁷⁹⁹ Bhāradvāja,⁸⁰⁰ Bhoja,⁸⁰¹ Cakṣuṣya,⁸⁰² Candrāṭa,⁸⁰³ Caraka,⁸⁰⁴ Carpaṭi, *Cikitsākalikā*,⁸⁰⁵ *Cikitsāsārasaṃgraha*,⁸⁰⁶ Ḍaḷhaṇa,⁸⁰⁷ Garga, Gopura, Hariścandra,⁸⁰⁸ Hārīta,⁸⁰⁹ Jejjāta,⁸¹⁰ Kharanāda,⁸¹¹ Kṛṣṇātreya,⁸¹² Kṣemendra,⁸¹³

Mārkaṇḍeyapurāṇa, *Nāgārjuna*,⁸¹⁴ *Narapaticaryā*,⁸¹⁵ *Padmapurāṇa*, *Pārāśara*,⁸¹⁶ *Prayogapārijāta*,⁸¹⁷ *Rasārṇava*,⁸¹⁸ *Ratnākara*, *Rudrāgama*,⁸¹⁹ *Rudrakautika*,⁸²⁰ *Rudratāntra*,⁸²¹ *Sarvāṅgasundara*,⁸²² *Śaunaka*,⁸²³ *Śivāgama*,⁸²⁴ *Śrīnivāsasamhitā*,⁸²⁵ *Suśruta*,⁸²⁶ *Tīsaṭa*,⁸²⁷ *Vāgbhaṭa*,⁸²⁸ *Vaidyaka*,⁸²⁹ *Vaikhāṇasa*,⁸³⁰ *Vaiṣṇavāgama*,⁸³¹ *Vaiśvānara*,⁸³² *Vasiṣṭha*, *Vāsudeva*,⁸³³ *Videha*,⁸³⁴ *Vīrabhadra*,⁸³⁵ *Vivekamārtanḍa*,⁸³⁶ *Vṛddhabhoja*, *Vṛddhahārīta*, *Vṛddhātreyā*, *Vṛddhavāgbhaṭa*, *Yogapradīpa*,⁸³⁷ *Yogarātnāvalī*,⁸³⁸ and *Yogaśārīra*.⁸³⁹

Sources left unmentioned may be Bhoja's *Cārucaryā*,⁸⁴⁰ Kaṇāda's *Nāḍīvijñāna*,⁸⁴¹ and Rāvaṇa's *Nāḍīparīkṣā*.⁸⁴² Some verses from the *Yogaśataka* are not indicated as such (2.97) or even said to derive from the *Cikitsākalikā* (2.76 and 78–81).

Volume III contains four chapters (chapters thirteen to sixteen of the *Āyurvedasaukhyā*). Chapter one deals with the five ways of diagnosing a disease (*nīdāna*, *pūrvavṛūpa*, *rūpa*, *upaśaya* and *saṃprāpti*) and quotes the verses relevant to this subject from the *Aṣṭāṅgahṛdayasamhitā*, adding comments in prose from an unknown source.⁸⁴³ It also gives examples of the various types of therapeutic diagnosis (*upaśaya*)⁸⁴⁴ and some verses on diseases acting as a causative factor for another disease.⁸⁴⁵ Chapter two is about the six ways of treatment (*laṅghana*, *bṛṇḥana*, *stambhana*, *sneha*, *sveda* and *rūkṣaṇa*) and chapter three about fever and the general lines of its therapy. Chapter four is concerned with the symptoms and therapy of particular types of fever: *navajvara* (1–6), *āma*- and *nirāmajvara* (7–25), *antarvega*- and *bahirvega*jvara (26–27), the dosic types (35–256), fourteen *saṃnipāta* fevers (257–691), *āgantū* fevers (692–738), irregular fevers (*viśamajvara*; 739–1069), relapsing fevers (*punarāvartakajvara*; 1070–1079), fevers located in the *dhātus* (1080–1095), chronic fevers (*jīrṇajvara*; 1103–1289); recipes for inducing sleep and rules pertaining to sleep (1290–1327) are followed by verses on the fever caused by alcoholic drinks (1349–1356), a fever occurring in regions situated at the foot of mountains (*aupatyakajvara*; 1357–1359), fevers caused by polluted water (1360–1371), and a series of fevers called *raudrajvara*, *māhendrajvara*, *jvareśvara*, *kālajvara* and *gambhīrajvara* (1373–1381); the chapter ends with verses on some miscellaneous subjects connected with fever.

Volume IV contains nine chapters (chapters seventeen to twenty-five of the *Āyurvedasaukhyā*), dealing with the symptoms and treatment of (1) *atisāra* (diarrhoea), (2) *saṃgrahaṇī* (sprue), (3) *arśas* (haemorrhoids), (4) *agnimāndya* (sluggishness of the digestive fire), (5) *kṛmi* (worms), (6) *pāṇḍuroga* (morbid pallor and jaundice), (7) *raktapitta* (haemorrhagic disorders), (8) *rājayakṣman* (consumptive disorders), and (9) *kāsa* (cough).

Volume V has fourteen chapters (chapters twenty-six to thirty-nine of the *Āyurvedasaukhyā*), dealing with the symptoms and treatment of (1) *hikkā* (hiccup) and *śvāsa* (respiratory disorders), (2) *svarabheda* (disorders of the voice), (3) *arocaka* (anorexia), (4) *chardi* (vomiting), (5) *tṛṣṇā* (thirst), (6) *mūrchā* (fainting), *bhrama* (giddiness), *nīdrā* (sleep), *tandrā* (drowsiness) and *saṃnyāsa* (loss of consciousness), (7) *pānātyaya*, *paramada*, *pānājīrṇa* and *pānavibhrama* (alcoholic disorders), (8) *dāha* (burning syndrome), (9) *unmāda* (insanity) and *bhūtonmāda* (possession by evil spirits), (10) *apasmāra* (epilepsy), (11) *vātavyādhi* (wind diseases), (12) *vātaśoṇita* (gout), (13) *ūrustambha* (stiffness of the thighs), and (14) *āmavāta* (rheumatic disorders).

Volume VI has eighteen chapters (chapters thirty-six and thirty-eight to fifty-three of the *Āyurvedasaukhya*),⁸⁴⁶ dealing with the symptoms and treatment of (1) *śūla* (piercing pain), (2) *pariṇāmasūla* (piercing pain appearing during digestion) and *annadravaśūla* (piercing pain appearing without any connection with the digestive process), (3) *udāvarta* (a group of disorders caused by the suppression of natural urges) and *ānāha* (obstructive abdominal swelling), (4) *gulma* (visceral swelling), (5) *hṛdroga* (heart diseases), (6) *urograha* (a disease characterized by swelling of liver and spleen and pain in the lateral parts of the abdomen) and *mūtrakṛcchra* (dysuria), (7) *mūtrāghāta* (urinary obstruction), (8) *aśmarī* (stones in the urinary tract), (9) *prameha* (urinary disorders) and *pramehapīḍakā* (pustules as sequelae of prameha), (10) *medoroga* (obesity), (11) *kṛśaroga* (emaciation), (12) *udara* (abdominal swelling), (13) *śoṭha* (localized swelling), (14) *vṛddhi* (scrotal swelling), (15) *galagaṇḍa* (goitre), *gaṇḍamālā* (lymphadenopathy), *apacī* (chronically suppurating lymph nodes), *granthi* (small tumour), *arbuda* (large tumour), (16) *ślīpada* (filariasis), (17) *vidradhi* (abscesses), (18) *vraṇa* (ulcers and wounds; burns, fractures and dislocations are included).

Volume VII consists of seventeen chapters (chapters fifty-four to seventy of the *Āyurvedasaukhya*), dealing with the symptoms and treatment of (1) *nāḍivraṇa* (sinuses), (2) *bhagandara* (anal fistulas), (3) *upadaniśa* (venereal diseases in the male), (4) *śūkadoṣa* (affections of the male member), (5) *kuṣṭha* (a number of skin diseases), (6) *śītapitta*, *udarda*, *koṭha* (forms of urticaria), (7) *amlapitta* (disorders of the stomach), (8) *visarpa* (erysipelas), (9) *visphoṭa* (vesicular eruptions), (10) *snāyuka* (dracontiasis), (11) *maśurikā* (smallpox and some other diseases), (12) *kṣudraroga*, (13) *mukharoga* (diseases of mouth and throat), (14) *karṇaroga* (diseases of the ears), (15) *nāsāroga* (diseases of the nose), (16) *netraroga* (eye diseases), (17) *śīroroga* (diseases of the head).

Volume VIII consists of sixteen chapters (chapters seventy-one to eighty-three and part of chapter eight of the *Āyurvedasaukhya*),⁸⁴⁷ dealing with (1) *aśṛgdara* (menorrhagia), *somaroga* and *mūtrātisāra*, (2) *yonivyāpad* (diseases of the female genital tract) and *yonikanda* (prolapse of the uterus), (3) *mūḍhagarbha* (malpositions), (4) *sūtikāroga* (puerperal diseases), (5) *stanaroga* (breast diseases), (6) *tanyaduṣṭi* (polluted breast-milk), (7) *bālaroga* (children's diseases), (8) *viṣa* (disorders due to poisons), (9) *rasāyana*, (10) *vājīkaraṇa*, (11) *sneha* (oleation), (12) *sveda*, *nasya*, *dhūmapāna*, *gaṇḍūṣa*, *kavala*, *pratisāraṇa*, (13) *vamana* and *virecana* (emetics and purgatives), (14) *basti* (enemas), (15) *uttarabasti* (urethral and vaginal douches), (16) *śoṇitasāra* (bloodletting).

Volume IX consists of four chapters (chapters seven, nine, ten and eleven of the *Āyurvedasaukhya*), dealing with (1) *parimāṇa* (weights and measures) and *paribhāṣā* (technical terms), (2) *rasādiśodhanamāraṇa* (the purification and killing of mercury, etc.), (3) *lohopaloḥaśodhanamāraṇa* *guṇāguṇaśaṃnipātāda* *viśeṣadhātumāraṇamalaharaṇasphuṭitadhātumṛdukarāṇa* (the purification and killing of the lohas and upaloḥas, etc.), (4) *rasoparasamahārasamañiratraśodhanamāraṇasattvapātanasattvamāraṇadrutikaraṇa* *guṇāguṇaviśalakṣaṇadivya* *auśadhādi* *lakṣaṇavahnī* *lakṣaṇatāilapātana* *kathana* (the purification and killing of the rasas, uparasas, mahārasas, maṇis and ratnas, the extraction and killing of essences, etc.).

Chapter one is subdivided into a number of sections: *parimāṇa* (1.2–95), *auśadhaparibhāṣā* (1.96–116), and *kalpanāparibhāṣā* (1.117–571). Many subjects are dealt with in all three sections, but the third one is particularly rich.

The section on *kalpanāparibhāṣā* discusses: the types of pharmaceutical preparations: *niryāsa* (= *svarasa*), *kalka*, *niryūha* (= *kvātha*), *śīta*(*kaṣāya*), *phāṇṭa*, *rasakriyā* (inspissated extract), *saṃdhāna* (fermented fluids), *guṭikā*, *cūrṇa*, *sneha*, and *kalpa* (1.117); *svarasa* (1.118–119); *kvātha* (decoction) (1.120–121); a substitute for *svarasa* (1.122); the preparation of *svarasa* (1.123–126); *kalka* (1.127–128); *śīta*(*kaṣāya*) or *hima* (1.129–132); *phāṇṭa* (1.133–136); *mantha* (1.137); *pramathiyā* (1.138); doses (1.140–143); the quantities of water to be used in preparing a decoction (*kvātha*) (1.144–150); five types of pharmaceutical preparation: *cūrṇa*, *kaṣāya*, *śīsira* and *śrīta phāṇṭa*, *kalka*, *svarasa* (1.151); the preparation of a decoction (1.152); the seven types of decoction: *pācana*, *dīpana*, *śodhana*, *śamana*, *tarpaṇa*, *kledana*, and *śoṣaṇa* (1.153); the actions of these types (1.154–155); emetics may be used to counteract the adverse effects of a *kledin* or *viśoṣin* decoction (1.156); rules for the preparation of the seven types (1.157–158); indications (1.159–161); copper vessels are unsuitable to the preparation of a decoction (1.162–163); decoctions should never be boiled again (1.164–165); fresh and old drugs should never be mixed (1.166); signs indicating that a decoction is well prepared and useful (1.167); complaints arising after taking a decoction should be treated with an emetic (1.168); (*pra*)*kṣepas*, also called *āvāpas*; rules concerning their employment (1.169–180); *prati**vāpa*, *niṣeka* and *abhi**seka*, i.e., substances to be added when melting metals, etc. (1.181–183); doses; ratios of ingredients in various types of preparation (1.184–198); definitions of a *niryūha* and a *maṇḍa* (1.199); the preparation of *anna*, a *peyā*, *vilepī*, *yavāgū*, *maṇḍa*, *yūṣa* (1.200–202); rules for the preparation of *yūṣa* and *rasa* (1.203–206); the preparation of *māmsarasa* (broth) for use in a *yavāgū* (1.207); the preparation of *kṛta*- and *akṛtayūṣa* (1.208–211); *cūrṇas* (1.212–215); *guṭikās* (1.216–219); the preparation of a *rasakriyā*; its dose (1.220); the preparation of an (*ava*)*leha* (1.221–222); signs indicating proper *guḍapāka* (i.e., the preparation of a *leha* containing *guḍa*) (1.223–225); the sign indicating that a *rasakriyā*, *leha* or *guḍa* has been properly prepared (1.226); the process of *puṭapāka* (1.227–230); the process of *bhāvanā* (1.231–232); the five defects that may occur in a medicine (1.233).

The chapter proceeds with discussing: *śilājatu* (1.234–252); *guggulu* (1.253); *taṇḍulodaka* (1.254); *muṣṭiyoga* (1.255); *phalavartī* (1.256–258); *kṣīrapāka* (1.259); *vajrakāñjika* (1.260); *pralepa* and *pradeha* (1.261–273); *upanāha* (1.274–275); *śīrolepa* (1.276); the preparation of *errhines* and their doses (1.277–280); mouth washes (*kavala*) and gargles (*gaṇḍūṣa*) (1.281–283); *pratisāraṇa* (1.284–285); caustics (*kṣāra*) (1.286–292); *āsavas* (1.293–298); *ariṣṭas* (1.299–300);⁸⁴⁸ enhancement of the efficacy of *āsavas* and *ariṣṭas* (1.301); the preparation of a *bhakta* (1.302); rules concerning *āsavas* and *ariṣṭas* (1.303–306); doses of *āsava* and *ariṣṭa* (1.307–308); alcoholic preparations (1.309–324); the preparation of various kinds of *cukra*, also called *śukta* (1.325–327); *kāñjika* (1.328); *tuṣāmbu* (1.329); *sauvīraka* (1.330–331); the duration of the process of fermentation, dependent on the season (1.332); *uṣṇodaka* (1.333); the periods of time for the application of an *añjana* (1.334); the three types of *añjana* and the sizes of the *vartī* (1.335); a *rasakriyā* used as an *añjana*; its dose

(1.336); types of añjana and their preparation (1.337–339); the rod (śalākā) for the application of an añjana; the materials that may be used (1.340–341); the technique of application (1.342–343); a rule for particular inorganic substances used in an añjana (1.344); the storage of añjanas (1.345); measures for the treatment of eye diseases: seka (sprinkling a fluid), āścotana (eyedrops), piṇḍī (the application of a paste and tying a bandage over it), viḍāla (the external application of a paste), tarpaṇa (the application of drugs thought to be nourishing), puṭapāka, and añjana (1.346); the technique of application, indications, doses, etc., with respect to seka (1.347–348), āścotana (1.349–351), piṇḍī (1.352), viḍāla (1.353), netrabasti (= tarpaṇa) (1.354–365); the four types of mūrḍhataila (application of oil on the head): abhyaṅga (massage with oil), pariṣeka (sprinkling), picu (application of a cotton swab soaked in oil), and śirobasti (application of a cap filled with oil) (1.366);⁸⁴⁹ the duration of these treatments (1.367); picu (1.368); śirobasti (1.369–373);⁸⁵⁰ the definition of a mātrā (unit of time for measuring the duration of basti, etc.) (1.374); the definition of the bath called avagāha or magna (1.375); the number of mātrās required for diffusion of an oil into various constituents of the body (1.376–378); pādābhyāṅga (massage of the soles of the feet with oil) (1.379–380); kaṇṭhapūraṇa (filling the ears with oil) (1.381); abhyaṅga of nails and navel (1.382); abhyaṅga in general (body massage with a fatty substance) (1.383–387); the technique of kaṇṭhapūraṇa and the periods of time suitable to it (1.388–390); the preparation of lākṣāraṣa (1.391–392); rules for the preparation of medicated ghees, oils and linctuses (1.393–410);⁸⁵¹ rules for the preparation of a medicated oil containing guggulu (1.411); rules for the preparation of a medicated oil containing milk (kṣīrapāka) (1.412) and particular other fluids (1.413–414); various other rules pertaining to the preparation of medicated oils (1.415–429); the signs indicating proper preparation (1.430); two types of preparing a medicated oil or ghee: mandacikkaṇa and kharacikkaṇa (1.431); three of these types: mṛdu, madhya and khara; their characteristics (1.432) and indications (1.433); madhyamapāka is the most useful type (1.434); the signs of proper preparation according to two authorities (1.435–436); more specifications regarding the preparation of medicated oils and ghees (1.437–444).

The next section of chapter one is concerned with: the period of time for beginning the processing of mercury (1.445); the quantity of mercury to be taken (1.446); the quantities of a series of other inorganic substances (1.447–450); the mentioned rules ought to be observed (1.451); a sattva can be extracted from mica and other substances when properly processed (1.452); the production of a kajjalī (1.453);⁸⁵² the production of the substance called umāyoni (1.454); the characteristics of purified copper (1.455); definitions of utthāpana and kṣālana (1.456), abhiṣeka (1.457); the production of dhautā (purified excrements of earthworms) (1.458); properties of the bhasman of mercury when prepared with vegetable substances (1.459); the doses of the bhasman of mercury for human beings, horses and elephants (1.460); the doses of this bhasman dependent on the method of its preparation, the indications for these varieties, and particularities regarding its administration (1.461–467); the addition of poisonous substances to the bhasman of mercury, dependent on the country of residence (1.468–471); the gradual increase of the doses; doses in different conditions (1.472–475); indications for the use

of a particular type of poison (1.476–477); the characteristics of brāhmaṇa, kṣatriya, vaiśya and śūdra poisons (1.478); general restrictions and indications for the use of poisons (1.479–480), followed by contra-indications (1.481).

The last section deals with: substitutes for medicinal substances that are difficult to procure (1.482–493); fruits to be used in adried condition (1.494–495); rules regarding the physician's share of the drugs to be employed in a treatment; two types of share are described, called dhanvantaribhāga or aśvinīkumārabhāga and rudrabhāga or rudrāṇṣa (1.496–501);⁸⁵³ a schedule for dosages in children (1.502–504); the preparation of a paste to be used in the pātana of mercury (1.505–506); jāraṇa of mercury (1.507–524); rules for the use of the bhasman of gold (1.525–529); the preparation of lohas, their doses, the course of treatment, their therapeutic effects, etc. (1.530–556); the preparation of bijas (1.557–561); two definitions of an āroṣa (1.562–563); the five substances collectively called pañcamrttikā (1.564); the description of the khalvayantra (mortar) and the peśya (pestle) (1.565–567);⁸⁵⁴ the use of the khalva (1.568);⁸⁵⁵ the round (var-tulā) khalva (1.569);⁸⁵⁶ the taptakhalva, made of iron (1.570).

The chapter ends with the instruction to teach the paribhāṣās to a worthy student, one's own son, or brāhmaṇas only (1.571).

The first part of chapter two is about: rasavidyā as a science to be kept as secret as a mother's genitals (2.1); a prayer to the lord of mercury, Sūtarāja (2.2–3); the synonyms of mercury, which are the same as those of Śiva (1.4); the seven kañcukas: mṛ-nmaya-, pāṣāṇa-, jalajakañcuka, two kañcukas due to the presence of lead (nāga) and two due to tin (vanga) (2.5); their characteristic effects on mercury (2.6); the five doṣas: mala-, vahnī-, bhū-, unmatta-, and śailadoṣa (2.7); the adverse effects of pṛthivīkañcuka (= bhūdoṣa), pāṣāṇadoṣa, vāridoṣa (= jalajakañcuka), kapālīkā,⁸⁵⁷ śyāmā,⁸⁵⁸ kālī,⁸⁵⁹ and kāpālī⁸⁶⁰ (2.8–11); the adverse effects of mala-, vahnī-, viṣa-, bhū-, darpa-, and unmattadoṣa (2.12); the kañcukas and doṣas should be removed for the purpose of making a bhasman; otherwise, one would incur the sin of brāhmaṇa murder (brahmahatyā) (2.13); characteristics and adverse effects of vaṅga-, āra-, nāga-, and rasakampadoṣa (2.14–19); removal of the doṣas (2.20–26); svedana of mercury (2.27–41); mardana (2.42–43); murchana (2.44–49); utthāpana (2.50); pātana (2.51–53); the production of a naṣṭapiṣṭa (2.54); the use of the taptakhalva (2.55); removal of lead and tin by means of pātana (2.56); the preparation of a piṣṭī (2.57); adhaḥpātana (2.58–61); ūrdhva-pātana (2.62–65); tiryakpātana (2.66–68); two descriptions of the kacchapayantra (2.69–76); the tulāyantra (2.77–79); bodhana or rodhana (2.80–83); niyamana (2.84–86); dīpana (2.87–90); a summary of the functions of the first eight saṁskāras, described in the foregoing (2.91–99); sulphur (gandha) is the rajas, mica (abhraka) the śukra of Pārvaṭī; both can embrace (combine with) mercury, which is the śukra of Śiva; this combination makes mercury suitable to the killing process without suffering injury (2.100–101); the jāraṇa of mercury with sulphur (2.102); mica is the tejas of Gaurī; its properties and actions; the combination of mercury with mica makes the former capable of inducing transmutation (vedha) (2.103–104); the gaurīyantra and its use in the jāraṇa of mercury with sulphur (2.105–112); not any amount of mercury or sulphur may be lost in the process (2.113–114); the vajramūṣā and its use (2.115–118); the paste (lepa) used for sealing the joints of crucibles (2.119); two ways of making a vajramūṣā (2.120–122);

glass bottles (kācakūpī) and iron vessels (lohakūpī), their lengths, and other details (2.123); another recipe for the preparation of a paste for sealing the joints of crucibles (2.124–125); the pakvamūṣā and its function (2.126); the mallamūṣā (2.127–128); a mūṣā for the purification of silver (2.129); the making of a nigaḍayantra; its function (2.130–132); another recipe for making this yantra; the process called nigaḍabandha, to be carried out by means of it (2.133–136); useful types of clay (mr̥d) (2.137); a recipe for preparing a paste to be used in sealing joints of crucibles and for wrapping around glass bottles (2.138–140); jāraṇā will be described later (2.141); the description of a process imparting a red colour to mercury, making it heatresistant, enabling it to digest other substances, etc. (2.142–152); the preparation of a piṣṭī, to be used in the jāraṇā with sulphur (2.153–154); the process called jāraṇa (2.155–158); stimulation of the digestive power (jaraṇa) of mercury (2.159); mercury that can digest metals is called āroṭa; the product of transmutation can be made stable by adding a bīja (2.160); the three types of jāraṇā called nirmukha, sanmukha and vāsanāmukha; three other varieties are called bāla-, yauvana- and vṛddhajāraṇā; the effects of the last three varieties; viḍa should be added during jāraṇa (2.161–164); the preparation of mercury from cinnabar (hiṅgula); this mercury is free from the kañukas and may be used in recipes (2.165);⁸⁶¹ the three types of hiṅgula (2.166);⁸⁶² their properties and uses (2.167–168); mercury extracted from cinnabar should also be purified (2.169); the properties and uses of haṁsapāda hiṅgula (2.170); the purification of hiṅgula (2.171); the properties and actions of hiṅgula (2.172).

The second part of chapter two deals with: the preparation of the bhasman of mercury, its use and its effects (2.173–191);⁸⁶³ other methods of preparation (2.192–195);⁸⁶⁴ methods of preparing rasasindūra (2.196–200); methods of preparing rasakarpūra; its properties and effects (2.201–208); the preparation of hariṇakhurī-baddharasa (2.209–215); another method of preparing rasasindūra; its use and effects (2.216–220); methods to prepare the bhasman of mercury (2.221–222); the preparation of a pāṇḍura bhasman that is useful in killing other metals (2.223–227); the preparation of a bhasman of mercury by means of several yantras (puṭayantra, bhairava- or somānālayantra, vālukāyantra); the recipe for a paste, called sarvato-mukhamudrā, for sealing the joints; the wonderful and curative effects of a mixture of the bhasman and another powder; rules regarding the diet, etc., of persons taking this drug (2.228–256); another way of preparing a bhasman of mercury (2.257–259); the preparation of a bhasman with a golden hue (2.260) and the colour of saffron (2.261); the preparation of vaikrāntabaddhasūta, its use and its effects (2.262–272); the preparation of another bhasman with curative properties (2.273–276); a way of preparing rasasindūra (2.277–279); the process of killing mercury requires the addition of gold, etc.; mercury is considered to be mūrchita when it looks like a collyrium (2.280–281); the preparation of a nirvīrya- and savīryabhasman; the latter is therapeutically more potent (2.282–283); the preparation of rasaparpaṭī, particularly useful in treating children (2.284–285); the preparation of a patient for treatment with a bhasman of mercury; a bhasman of copper should be given first; the dose of bhasman of mercury should be gradually increased according to a particular schedule (2.286–287); rules for those using a bhasman of mercury; a group of eight vegetables, called kakārāṣṭaka,

may not be eaten; other dietary articles to be avoided; types of women to be avoided and women to be chosen as attendants; the type of woman called *kākinī*; intercourse with her frees from all diseases (2.288–300); intake of the bhasman of mercury leads to a heightened libido during the first three weeks; intercourse, however, should be avoided during this period, because it would result in *śukrameha*; after three weeks, pretty women may massage the body of the person using the bhasman, which will help in making the mercury permeate all the tissues; additional rules for the regimen during treatment; sexual intercourse would result in death (2.301–305); the symptoms occurring when the bhasman is not properly digested, and the treatment of this disorder, called *rasājirṇa* (2.306–313); treatment of the effects caused by the intake of mercury, tainted by the association with lead (2.314) or tin (2.315); signs indicating the proper digestion of the bhasman (2.316); a description of *hīṅgula* (2.317–318); the effects of purified and killed mercury (2.319–321).

The third part of chapter two is about: the mythical origin of sulphur (*gandhaka*) (2.322); the four types of sulphur and their uses (2.323);⁸⁶⁵ various methods for the purification of sulphur (2.324–334); the preparation of *gandhakataila*, to be used in recipes (2.335–337); the adverse effects of impure sulphur (2.338); two more ways of preparing *gandhakataila*, to be used in processing mercury and in recipes (2.339–342); the mythical origin of the metals, sulphur, and mica (2.343–344); sulphur and mica are similar to mercury in preventing (untimely) death (2.345); those desiring a healthy condition should offer their prayers to the sun, those striving after replenishment of their bodily constituents should pray to the moon, those wanting to be freed from disease should pray to the highest *Devadeveśa* (i.e., *Śiva*) (2.346); the mythical origin of mica (*abhṛaka*) (2.347); the four varieties of mica and their uses (2.348–349);⁸⁶⁶ the effect of fire on the *pināka* type of mica; intake of its bhasman leads to *mahākuṣṭha* (2.350); the effect of fire on the *dardura* type; intake of this type may lead to *bhagandara* (2.351); the effect of fire on the *nāga* type; its intake causes *udara*, *prameha* and impotency (2.352); the *vajra* type remains stable under the influence of fire; it cures diseases and prevents decrepitude and death (2.353); a mythical story about the origin of the *vajra* type, explaining its name (2.354–356); the four types of mica: *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra*, white, red, yellow and black in colour respectively (2.357); the *sattva* of mica is responsible for its actions; mica, collected in the northern mountains, contains more *sattva* than that coming from the south; the black variety is the best for therapeutic purposes (2.358–359); the removal of the defect called *giridoṣa* (2.360); further purificatory procedures (2.361–365); the preparation of *dhānyābhra*, used in killing mica (2.366); the adverse effects of impure mica and of mica that is not killed (2.367); various methods of preparing the bhasman from *dhānyābhra* (2.368–379); therapeutic effects of the bhasman (2.380); preparation of the bhasman in the *andhamūṣā* by means of one *gajapuṭa* (2.381); two other methods of preparing the bhasman (2.382–384); the *amṛtīkaraṇa* of mica (2.385–386); the effects of the bhasman (2.387–389); the dose and its gradual increase (2.390); two methods of extracting the *sattva* (2.391–394); the formula of *kṣayāntakarasa* and its curative actions (3.395–396); the therapeutic actions of the bhasman, dependent on the number of *puṭas* during its preparation (2.397); the bhasman of mica is called *bīja* after having been subjected to a hundred *puṭas*; this *bīja*

leads to the formation of ojas and to beauty, and sustains the body (2.398); gold, silver, copper, iron of the *tīkṣṇa* type, tin (*kūṭila*), and lead (*pañnaga*) are the six natural metals used in processing mercury (2.399). The last verse summarizes the contents of the chapter (2.400).

Chapter three deals with: the eight metals (*loha*), used for *dehasiddhi*: gold, silver, copper, lead, tin, *kānta*(*loha*), *tīkṣṇa*(*loha*), and *muṇḍa*(*loha*) (3.1); the three artificial (*kṛtrima*) metals: *ghoṣa*, *rīṭikā* and *āvarta* (3.2ab); *maṇḍūra*, the waste product (*kiṭṭa*) of *muṇḍa*, is called an *upaloha* (1.3.2cd); the excellent metal called *sāmbūka* (iron from meteorites), which is a product of lightning (*vidyut*), is called a *mahāloha*; it falls from the sky upon the earth, is rare, and may be obtained as a boon from *Vetālas*, etc. (3.3–4ab); iron from the *śālagrāma*,⁸⁶⁷ extremely rare (3.4cd); *sphāṭika* iron, extracted from *sphāṭika* found in *Kaśmīr*, is available in scanty amounts (3.4ef); the eight metals are, according to the *Nandikācāryatantra*: gold, silver, copper, lead, tin, *kānta*(*loha*), *vidyujja*(*loha*) (arising from lightning) and *sphāṭikodbhūta* (3.5);

the mythical origin of gold and its five types (3.6–8);⁸⁶⁸ the relative merits of three kinds of gold, dependent on their colours (3.9);⁸⁶⁹ the ten defects (*doṣa*) of gold; their presence makes it unsuitable to medicinal use (3.10); the adverse effects of impure gold (3.11); the purification of gold (3.12–13);⁸⁷⁰ eight methods for the preparation of the *hasman* of gold (3.14–37);⁸⁷¹ the storage of the *hasman* (3.38); rules for its administration (3.39); metals are reduced to a *hasman* by the smell of sulphur or *māksika* (3.40); the properties and actions of (the *hasman* of) gold (3.41–45);

the three types of silver (3.46);⁸⁷² its mythical origin (3.47); characteristics which make silver unsuitable to use (3.48); characteristics of silver suitable to use (3.49); the purification of silver (3.50–51);⁸⁷³ adverse effects of impure silver (3.52); four methods of preparing the *hasman* (3.53–57); the properties and actions of the *hasman* (3.58–59);

the mythical origin of copper (3.60);⁸⁷⁴ regions where good types of native copper are found (3.61); the properties and relative merits of copper from these regions (3.62–63); properties due to impurities; the defects (*doṣa*) of copper (3.64–65); methods of purification (3.66–67); the adverse effects of copper affected by the *doṣa* called *kālikā* (3.68); the removal of *kālikā* (3.69–71); the characteristics of copper free from *kālikā* (3.72); the purification of copper in the *kavacīyantra* (3.73–74); the actions of copper purified in this way (3.75–76); the preparation of the *hasman* (3.77); its therapeutic actions (3.78); two other methods of preparing the *hasman*; its therapeutic actions (3.79–83); a fourth method of preparing the *hasman* (3.84–85); a method of making copper melt quickly (3.86); a fifth method of preparing the *hasman* (3.87–88); two opinions concerning the composition of the group of substances called *pañcāmṛta*, used in the *puta* of the *hasman* of copper (3.89–90); disorders caused by unprocessed (*apakva*) copper (3.91); only copper free from *kālikā* should be used in recipes (3.92); the therapeutic actions of copper preparations (3.93–95);⁸⁷⁵

the two types of tin⁸⁷⁶ and their relative merits (3.96);⁸⁷⁷ characteristics that make it suitable to use (3.97); the five defects of tin which make it unsuitable to use (3.98); the purification of tin; its actions in a purified and in an impure state (3.99–102); six methods of preparing the *hasman* (3.103–115); diseases caused by unprocessed (*pā-*

kaḥīna) lead and tin (3.116); a seventh method of preparing the bhasman of tin (3.117); properties and actions of tin preparations (3.118–119);

the properties of suitable and unsuitable types of lead (3.120);⁸⁷⁸ its purification (3.121–122a); six methods of preparing the bhasman (3.122b–131); the actions of the bhasman (3.132–136);

pittala (= rītikā) (brass)⁸⁷⁹ and kāṁsya (= ghoṣa) are usually not regarded as very useful in medicine (3.137); the preparation of kāṁsya (bronze);⁸⁸⁰ the best variety is that produced in Saurāṣṭra (3.138); the seven good (3.139) and bad (3.140) qualities of kāṁsya; kāṁsya may be purified and killed like copper (3.141); an adverse effect of impure kāṁsya (3.142); properties and actions of purified kāṁsya (3.143–144); the two types of pittalī (= pittala) and how to distinguish them (3.145–146); the characteristics of pittala of good quality (3.147); rītikā may be purified and killed like copper (3.148); the properties and actions of rītikā preparations (3.149);

the mythical origin of iron (3.150–152); the topics to be discussed⁸⁸¹ (3.153–154); the quantity of iron to be taken for processing (3.155); the preparation of a triphalā decoction for the nirvāpaṇa (immersion of a heated metal in a fluid) of iron (3.156); removal of the impurity called girimālā (3.157–158); the origin of various types of iron from the body of the Daitya called Lomila, who was killed by the gods (3.159–162); iron is used as an aphrodisiac and in the treatment of vāta diseases (3.163); iron is of three main kinds:⁸⁸² muṇḍa,⁸⁸³ ūkṣṇa⁸⁸⁴ and kānta;⁸⁸⁵ muṇḍa is of three varieties: mṛḍu, kuṇḍa and kaṇḍāra;⁸⁸⁶ ūkṣṇa is of six varieties: kharasāra,⁸⁸⁷ hotālā, taḍāvaṭṭa,⁸⁸⁸ ciḍa, kāntaloḥa and gajākhyā; kānta is of four varieties: romaka, bhrāmaka, cumbaka and drāvaka (3.164–166ab);⁸⁸⁹ the Rasārṇava distinguishes a fifth variety, called karṣaka (3.166cd);⁸⁹⁰ iron originating from a particular mine (ākara) cures the diseases of the people living in the country where that mine is located (3.167); the two types of sāra (= sattva) of iron: audra⁸⁹¹ and kaliṅgaja; the characteristics of the bhasman of the kaliṅgaja type (3.168–169); the two types of iron ore (3.170); the ten varieties of iron according to the *Lohapaddhati* (3.171–173); the therapeutic actions of iron (3.174); the characteristics of the types of iron called paṇḍya, mahīṇḍaka, kāntija, kṛṣṇāyasa and kānta (3.175–179); a combination of mercury and iron sustains the body (3.180); the therapeutic actions of the varieties of kāntaloḥa called sāra, auṇḍra, kaliṅgaja, taḍāvaṭṭa and bhadra (3.181–185); the therapeutic actions of paṇḍi, kāntija and kānta iron (3.186–188); the rust (kiṭṭa) of each variety of iron has the same effects as the iron from which it originates (3.189); the relative merits of kiṭṭa, muṇḍa, sāra, auṇḍra, kaliṅga, bhadra, vajra, paṇḍya, and kāntija; the last type is the very best (3.190–191); the properties of kānta iron, derived from śālagrāma stones, iron derived from sphatika, and the type finding its origin in lightning; these types should be used in mercurial recipes and for rasāyana purposes; the actions of iron that has the form of a liṅga (3.192–193); the adverse effects of impure iron (3.194–195); the seven defects (doṣa) of iron (3.196); four methods of purifying iron (3.197–203); signs indicating that iron has been purified (3.204); seven methods of preparing the bhasman of iron (3.205–225); gaṇḍanikā, the chief drug used in the killing of iron; its synonyms (3.226–227); eight drugs employed in the killing of iron: amarī, cāṅgerī, vikankata, raktamāriṣa, tvacaka, manahṣilā, hīṅgula, and svarṇamākṣika; the curative actions of these drugs (3.

228–230); three more methods of preparing a bhasman by killing iron (3.231–238); four methods of ayaskṛti, which produces a bhasman that is vāritara (floating on water) and niruttha (iron cannot be retrieved from it) (3.239–247); the preparation of a red bhasman, also vāritara and niruttha, by means of the juice of the plant called śālicīñī, also known as chilahiṇḍikā, garuḍiṇī, pātālamahauṣadhi and gartālābu; rules for the use of this powder; its curative properties (3.248–254); signs indicating that iron has been killed properly (3.255); another way of preparing a niruttha bhasman (3.256); rules for the steeping (bhāvanā) of iron in particular fluids and for the number of puṭas in order to achieve particular curative effects of the preparation (3.257–259); a divergent opinion on this subject (3.260); further processing of the bhasman of iron, making it suitable to yogavāha⁸⁹² (3.261); the preparation of the bhasman of a metal in general, as required for the achievement of curative properties (3.262–274); the removal of impurities from metals (3.275); the treatment of disorders caused by defective digestion of a bhasman (3.276); colouring (rañjaka) of the body is effected by kāmśya killed by means of punarnavā, iron killed by triphalā, and copper killed by sulphur (3.277);

the purification of zinc (kharpara) (3.278);⁸⁹³ zinc may be killed like tin or copper; its curative properties; zinc (kharpara) is commonly known as yaśada (3.279–280); tin should be killed by means of (hari)tāla, tīkṣṇa(loha) by cinnabar, gold by lead, lead by (manah)śilā, copper by sulphur, and silver by tāpya (= māḥṣika) (3.281); methods making a brittle metal malleable (3.282); the general curative properties of bhasmans (3.283); longevity, strength and health are brought about by diamonds, gold and mercury, collectively called amṛtatraya (3.284); praise of the physician thoroughly conversant with the preparation and administration of the eight types of bhasman (3.285–286); the curative properties of the bhasman of iron (3.287–290);

the purification of maṇḍūra (iron oxide)⁸⁹⁴ (3.291); the relative merits of maṇḍūra, dependent on its age (3.292); the characteristics of the useful type of maṇḍūra (3.293); two more methods of purifying maṇḍūra (3.294–295).

Chapter four deals with: the seven upadhātus: māḥṣika, tuttha, abhra, nīlāñjana, (manah)śilā, (harit)āla, and rasaka; some add vimalā as the eighth one of the series (4.1);

the mythical origin of māḥṣika⁸⁹⁵ (4.2–3); the two types of māḥṣika, distinguished according to its colour; the four types, distinguished according to its form (4.4–5); the relative merits of various types of māḥṣika (4.6–7); adverse effects of impure māḥṣika (4.8); the properties of hema- and rajatamāḥṣika (4.9);⁸⁹⁶ three methods of purifying māḥṣika (3.10–13); adverse effects of unpurified (apakva) māḥṣika (4.14); two more methods of purifying māḥṣika (4.15–16); preparation of the bhasman (4.17); two more methods of purifying māḥṣika (4.18–20); the purification of vimalā, by some regarded as identical with kāmśyamāḥṣika (4.21–22); the properties and actions of māḥṣika (4.23–24); three methods of extracting the sattva (4.25–30); the therapeutic actions of the sattva (4.31–32);

the two types of vimala:⁸⁹⁷ vimala and amala (4.33); the properties and actions of vimala (4.34); the purification of amala (4.35) and vimala (4.36–37); vimala may be killed in the same way as māḥṣika (4.38); the therapeutic actions of killed vimala (4.39); the extraction of the sattva (4.40–41); the therapeutic actions of the sattva (4.42);

the mythical origin of sasyaka⁸⁹⁸ (4.43); the colour of the variety of sasyaka called tuttha (4.44); the purification of sasyaka (4.45); the extraction of the sattva (4.46–47); the therapeutic effects of the sattva of mayūratuttha (= sasyaka) (4.48);

the five types of añjana: sauvīra, rasāñjana, srotoñjana, puṣpāñjana, and nīlāñjana (4.49); the colour of sauvīrāñjana⁸⁹⁹ and its therapeutic effects (4.50);⁹⁰⁰ its curative actions (4.51); srotoñjana⁹⁰¹ occurs in rivers; its curative actions (4.52–53); the properties of puṣpāñjana,⁹⁰² which cures eye diseases (4.54); nīlāñjana⁹⁰³ makes iron malleable; its therapeutic actions (4.55); the purification of añjanas in general (4.56); the purification of nīlāñjana (4.57–58); the sattva of añjanas can be extracted in the same way as that of manaḥśilā (4.59);

the purification and killing of abhra (mica) has already been described; the extraction of its sattva will be discussed afterwards (4.60);

the mythical origin of śilājatu,⁹⁰⁴ a substance exuding from mountains during the summer heat (4.61–62); śilājatu is very heavy due to its association with various metals; the type of association determines the names of its varieties (4.63); seven types are distinguished: suvarṇa-, rūpya-, trapu-, sīsa-, tāmra-, loha-, and manaḥśilāśilājatu;⁹⁰⁵ the best śilājatu occurs in the Vindhya mountains (4.64); the characteristics, properties and curative effects of kāñcana (= suvarṇa)śilājatu (4.65–66), raupyaśilājatu (4.67), tāmraśilājatu (4.68), trapuśilājatu (4.69), sīsaśilājatu (4.70), āyasa (= loha)śilājatu (4.71–72); the necessity of purifying śilājatu (4.73); therapeutic actions of śilājatu (4.74); the colours of the different types may be examined under the influence of fire or water (4.75); the properties and actions of śilājatu in general (4.76–80); the extraction of the sattva; its therapeutic actions and use in the bandha of mercury (4.81–82);

the three types of rasaka,⁹⁰⁶ their characteristics and relative merits (4.83); three other types. distinguished as to colour (4.84); three methods of purification (4.85–87); rasaka becomes very unstable when heated; the sattva or rasa of kiñculu is the only substance that can stabilize it (4.88–89); therapeutic effects of rasaka (4.90); extraction of the sattva (4.91–93); procedures making rasaka heatresistant (4.94–101);

bhūnāgas;⁹⁰⁷ their purification; the extraction of the sattva (4.102–104); the collection and keeping of bhūnāgas; the extraction of the sattva; a ring made with this sattva is effective in poisoning and snake-bite (4.105–107); the bile and feathers of peacocks may be treated in the same way in order to extract a sattva with the same properties (4.108);

the mythical origin of (hari)tāla⁹⁰⁸ and manohvā (= manaḥśilā) (4.109); the four varieties of haritāla: godantaka, piṇḍa, ghaṭalākṛti, and kīṭānana; the last of these is the best (4.110); adverse effects of unpurified haritāla (4.111); the properties and curative effects of pure haritāla (4.112); the purification of haritāla (4.113–114); another method, by boiling it with the plant called haritālī or haṃsarāja (4.115); the extraction of the sattva; its properties and therapeutic actions (4.116–126); another way of extracting the sattva (4.127–138);

the mythical origin of manaḥśilā (4.139);⁹⁰⁹ its three varieties: śyāmāṅgī, kaṇṭhāntikā, and khaṇḍākhya; the characteristics and relative merits of these varieties (4.140–142);⁹¹⁰ the adverse effects of unpurified manaḥśilā (4.143); its purification (4.144); the properties and actions of purified manaḥśilā (4.145); the sattva should be

extracted in the same way as that of haritāla (4.146);

the eight mahārasas are: rasaka, rasa, śaila, capala, amala, sasyaka, māṅṣika, and darada (4.147); according to another opinion the mahārasas consist of: vaikrāntaka, ayaskānta, vimalā, darada, pavi, tāpya, and rasaka (94.148);⁹¹¹ the rasas consist of: abhraka, tutthaka, kānta, rājāvarta, añjana, vajra, vaikrānta, and ṭaṅkaṇa (4.149); the uparasas are: gandhaka, tālaka, śilā, kṣitikecara, gairika, etc. (4.150); according to the *Rasasindhu* they consist of: gandha, tāla, śilā, tuttha, bhūnāga, nilāñjana, kāsisa, ṭaṅkaṇa, śaṅkha, kaṅkuṣṭha, and varāṭaka (4.151); according to the *Rasaratnākara* the uparasas are: gandhaka, vajra, vaikrānta, vajrabhra, tālaka, śilā, kharpara, śikhituttha, vimalā, hemamāṅṣika, kāsisa, kāntapāṣāṇa, varāṭa, añjana, rāvaṭa, kaṅkuṣṭha, śaṅkha, bhūnāga, ṭaṅkaṇa, and śilā jatu (4.152–153); gandhaka has the nature of a sattva and is therefore described along with mercury (4.154); the eight sādharmaṇarasas, helpful in the processing of mercury, consist of: kampilla, capala, gaurīpāṣāṇa, navasāraka, kaparda, vahnijāra, girisindūra, and bodāśaṅga (4.155–156);

the properties of capala,⁹¹² which is helpful in the bandha of mercury (4.157); the relative merits of the varieties of capala (4.158); the explanation of its name (4.159); capala which remains stable under the influence of fire is the most useful kind (4.160); a second explanation of the name capala (4.161); the preparation of the capala called nāgasamabhava,⁹¹³ which is used in the bandha of mercury (4.162–163); capala can be killed in the same way as copper (4.164); the properties and uses of capala and its therapeutic effects (4.165–167); the purification of capala (4.168–169); the sattva can be extracted in the same way as that of abhraka; the use of the sattva in the bandha of mercury (4.170);

the mythical origin of vaikrānta;⁹¹⁴ the explanation of its name (4.171); the site where it occurs; its seven varieties; the best variety is that with the colour of an emerald (4.172);⁹¹⁵ the uses of the varieties (4.173);⁹¹⁶ someone wanting to process vaikrānta should offer homage to Gaṇeśa and Bhairava; the latter deity stays there where vaikrānta is found (4.174);⁹¹⁷ two methods of purifying vaikrānta (4.175–176);⁹¹⁸ two methods for the killing of vaikrānta (4.177–179); the therapeutic effects of (the bhasman of) vaikrānta (4.180–182); two ways of extracting the sattva (4.183–186); a procedure that makes vaikrānta assume the colour of blood; this product has wonderful properties (4.187);

the characteristics of sasyaka⁹¹⁹ (4.188); sasyaka may be purified like māṅṣika, killed like copper or māṅṣika; its sattva may be extracted like that of māṅṣika (4.189); the therapeutic actions of sasyaka (4.190);

kāntaloḥa is of five varieties: bhrāmaka, cumbaka, karṣaka, drāvaka, and roma-ka;⁹²⁰ these have one to five sharp edges (mukha); kāntaloḥa is of three colours, yellow, red and black, which represent Brahmā, Viṣṇu and Maheśvara; the yellow variety is helpful in transmutation, the red one in rasāyana, and the black one in the bandha of mercury (4.191–194); the relative merits of bhrāmaka, etc. (4.195); the characteristics of the five types (4.196); their relative merits again (4.197); bhrāmaka and cumbaka are useful in treating diseases, karṣaka and drāvaka for rasāyana purposes and the processing of mercury (4.198); kāntaloḥa exposed to wind and the heat of the sun should not be used (4.199); the purification of kāntaloḥa (4.200–201); ritual offerings to kā-

ntaloha that is to be employed in rasāyana and the processing of mercury (4.202); the successive conversion of bhrāmaka, etc., into cumbaka, etc., by means of goat's blood (4.203); the interactions between kāntaloha and mercury (4.204–205); the extraction of the sattva (2.206–208); kāntaloha may be killed in the same way as iron in general (4.209);

the mythical origin of diamonds (4.210–211); the diamond is the very best among the uparasas and mahārasas (4.212); diamonds are of four types: brāhmaṇa, kṣatriya, vaiśya, and śūdra;⁹²¹ they are also male, female or napuṃsaka;⁹²² the colours of the brāhmaṇa type, etc., are white, red, yellow, and black (4.213); the characteristics, actions and uses of male, female and napuṃsaka diamonds (4.214–219);⁹²³ the actions and uses of brāhmaṇa, etc., diamonds (4.220–221); the characteristics of the type of diamond suitable to the processing of mercury (4.222); the availability of diamonds in the four yugas (4.223–224); a second set of characteristics of diamonds suitable to the processing of mercury (4.225); a diamond of excellent quality, mounted in a gold ring, wards off, when worn, all diseases (4.226); the beneficial effects of the wearing of diamonds; pregnant women should not wear diamonds, because they arrest the development of the child (4.227–230); adverse effects of unpurified diamonds (4.231); two methods of purification (4.232–234); diamonds may be killed in three ways (gati), resulting in the production of a druti (a fluid form), bhakta (a soft and swollen form), or bhasman (a powder); a druti is superior to a bhakta, a bhakta to a bhasman (4.235); a druti is used for rasāyana and in processing mercury, a bhakta in dhātuvāda, a bhasman in treating diseases (4.236–237); four methods for preparing a druti (4.238–244); the preparation of a bhakta (4.245); four methods for preparing a bhasman (4.246–250); the preparation of the bhasman of diamonds of the brāhmaṇa (4.251), kṣatriya (4.252), vaiśya (4.253), and śūdra type (4.254);⁹²⁴ the preparation of the bhasman of male, female and napuṃsaka diamonds (4.255);⁹²⁵ defects in diamonds (4.256);⁹²⁶

rājāvarta⁹²⁷ is of two types: guṭikā and cūrṇa (4.257); its purification (4.258) and therapeutic actions (4.259); the extraction of the reddish yellow sattva (4.260–261);

brahmapiśācīkā⁹²⁸ resembles the white variety of ṭarikaṇa (4.262); its properties, uses and curative actions (4.263); brahmapiśācīkā may be purified like ṭarikaṇa (4.264);

ṭarikaṇa⁹²⁹ is of three types: sphaṭikābha, guḍaprabha, and pañcūra, also known as nīlakaṇṭha (4.265); their relative merits (4.266); the actions of ṭarikaṇa (4.267); its purification (4.268);

the characteristics of kampillaka,⁹³⁰ which is available in Saurāṣṭra (4.269); its therapeutic actions (4.270);⁹³¹ the characteristics of gaurīpāṣāṇa;⁹³² the usefulness of its bhasman (hatacūrṇaka) in the bandha of mercury; the medicinal properties of the bhasman (4.271);⁹³³

the preparation of the caustic called navasāra or cūlikālavaṇa (4.272);⁹³⁴ the uses and medicinal actions of navasāra (4.273);⁹³⁵ viḍa, also called cūlikālavaṇa, is active against all three doṣas (4.274);⁹³⁶

the colour, aspect and shapes of varāṭikās,⁹³⁷ also called barābara (4.275); the relative merits of various kinds of varāṭikās, according to their weights (4.276); their properties, uses and therapeutic actions (4.277–278ab); there are also other varāṭikās, either male or female; these are heavy and provoke kapha and pitta (4.278cd); the purifica-

tion of varāṭikās (4.279);⁹³⁸ the actions of mercury bound (baddha) by śaṅkhas, śukṭis, varāṭikās and caustics (4.280);

agnijāra⁹³⁹ consists of the jarāyu, desiccated by the heat of the sun, of agninakras, which live in the ocean (4.281); agnijāra is helpful in the jāraṇa of mercury and possesses a number of medicinal virtues (4.282);⁹⁴⁰

the place of origin and the characteristics of girisindūra⁹⁴¹ (4.283); its uses and therapeutic actions (4.284);⁹⁴²

vedāra⁹⁴³ occurs on the slopes of the Arbuda mountain in Gurjaramaṇḍala (Gujarāt); it is scaly (sadala) and yellow in colour (4.285); vedāra possesses a sattva; it is used in the bandha of mercury, is active against vāta and kapha, cures disorders in males, and is an excellent drug for restoring the black colour of the hair (4.286);⁹⁴⁴

the nature of amṛtaśṛṅga⁹⁴⁵ (4.287); its uses and therapeutic actions (4.288); its common name is bodāśaṅkha (4.289);

a general method for purifying sādhaṇaśaṅkhas (4.290);⁹⁴⁶ their sattva may be extracted on the same lines as that of mica (4.291);

kaṅkuṣṭha is available in the foothills and mountains of the Himālayas (4.292);⁹⁴⁷ the two types of kaṅkuṣṭha: tālika and reṇuka; their properties and relative merits (4.293); two divergent opinions on the identity of kaṅkuṣṭha; these substances should not be used in the processing of mercury, nor in recipes, because they may bring about numerous disorders (4.294–295); the properties, uses and therapeutic actions of kaṅkuṣṭha (4.296); its purification (4.297);⁹⁴⁸

the preparation of a viḍa, helpful in making mercury digest gold (hema jāraṇa) (4.298); substances to be used in the killing of iron and the digestion of iron by mercury (4.299); the preparation of a substance enabling mercury to digest all sattvas (4.300);

kāsīśa⁹⁴⁹ is of three types; the properties of the yellow type, called puṣpakāsīśa (4.301); the relative merits of the three types of kāsīśa (4.302); kāsīśa is cooling and resembles mercury in its properties; its therapeutic actions (4.303); the purification of kāsīśa (4.304);⁹⁵⁰

the characteristics of gairika⁹⁵¹ (4.305); its properties and curative virtues (4.306); the purification of gairika (4.307);

kārikṣī⁹⁵² is of two types: black and yellow (4.308); its properties and curative actions (4.309); the purification of tuvarī⁹⁵³ (4.310);

the characteristics, properties and therapeutic actions of sphaṭikā⁹⁵⁴ (4.311–312); its purification may be carried out on the same lines as that of kārikṣī (4.313);

a general method of purification applicable to all the mahāśaṅkhas, śaṅkhas and upaśaṅkhas; after this purification, the sattvas can be extracted (4.314–317); a general method for extracting sattvas (4.318–321); signs relative to the flames of the fire, indicating that a sattva has flown out (4.322); the softening of a hard sattva (4.323–326); this softening is necessary because a hard sattva cannot permeate mercury or the human body (4.327); the characteristic colours of the flames during the extraction of particular sattvas (4.328–330); the signs indicating that the process of purifying a metal has been completed (4.331); characteristics of the flames during the extraction of the sattva from copper (4.332); the measurements of the koṣṭhī, required for the extraction of a sattva (4.333); the type of fuel and the way to use it (4.334); the relative potencies of a sattva, a druti,

and a druti added to mercury (4.335); the construction of the koṣṭhī (4.336–337); the qualities required in a physician who devotes himself to alchemical practices (4.338);

all sattvas should be converted into their bhasmans before use (4.339); the sattva of a particular metal, etc., should be purified like the corresponding metal, etc. (4.340); making the particles of a sattva cohere like a khoṭa (a solid ball) (4.341); sattvas may be converted into a bhasman by the same methods as those employed in the killing of copper or gold (4.342); metals suitable to the bandha of mercury (4.343–344);⁹⁵⁵

six kinds of salt are distinguished: sāmudra, saindhava, vīḍa, sauvarcala, giḍa,⁹⁵⁶ and cūlikā (4.345); the sources of salts and caustics; the origin of yavakṣāra (4.346);⁹⁵⁷ sources of saindhava salt (4.347); the source of sāmudra; places where saindhava is available (4.348); various types of saindhava, their properties, uses and curative actions (4.349–351); the alchemical uses and curative virtues of salt mixed with sulphur (4.352); the shape of salt obtained from a tank (kuṇḍa) containing saline water (4.353);

the groups of substances called madhuratraya (4.354), mitrapañcaka (4.355) and kaṭutraya (4.356), and the alchemical uses of the latter two; the preparation of a dhū-takṣāra from various plants (4.357–358); the preparation of a vṛntakṣāra from various plants (4.359); the preparation of a kṣāra (caustic) in general; its properties; the explanation of the term kṣāra (4.360); the four most important kṣāras (4.361); birds whose excrements may be employed in alchemical procedures (4.362);⁹⁵⁸ the composition of the group of substances called dugdhavarga, consisting of milks and milky saps from plants (4.363–364);⁹⁵⁹ the five upaviṣas: snuḥī, arka, karavīra, lāṅgalī and viṣamuṣṭikā (4.365); the sources of oils employed in processing mercury (4.366–368); the sources of vasā employed in processing mercury (4.369);⁹⁶⁰ animals, whose urine, seed and menstrual discharge are employed in processing mercury (4.370); the groups called pañcagavya, pañcamāhiṣa, pañcāḥa, and pañcāvi (4.371); the groups of substances, also employed in alchemical procedures, which are called pañcāmḷa (4.372), amlavarga (4.373–375), raktavarga (4.376–377), pītavarga (4.378),⁹⁶¹ śvetavarga (4.379–381), kṛ-ṣṇavarga (4.382),⁹⁶² drāvaṇapañcaka (4.383), śodhanatritaya (4.384), the group of drāvaka plants (4.385),⁹⁶³ the group of krāmika plants (4.386–387), the groups called a-ṣṭamūlikā (4.388)⁹⁶⁴ and pañcaratna (4.389),⁹⁶⁵ the group of māraka plants (4.390–394),⁹⁶⁶ the group called apunarjanmakavarga (4.395–396), and the group of divyau-ṣadhis (4.397–399);

descriptions of a series of divyauṣadhis and their uses in alchemy and medicine: kṣiprā⁹⁶⁷ (4.400–404), dagdharuhā (4.405–407),⁹⁶⁸ sthalapadminī (4.408–409),⁹⁶⁹ nā-gadamanī (4.410–414),⁹⁷⁰ uccaṭā (4.415–416),⁹⁷¹ vartulaparnī (4.417),⁹⁷² rudantī (4.418–420), the three varieties of citraka (4.421–426),⁹⁷³ jyotiṣmatī (4.427–431),⁹⁷⁴ umā (4.432–434), chāyādruma (4.435–445), kaṭutumbī (4.446–448),⁹⁷⁵ kṣīrakanda (4.449–451),⁹⁷⁶ devadālī (4.452–454),⁹⁷⁷ tṛṇajyotis (4.455–456),⁹⁷⁸ and śvetaguñjā (4.457–461);⁹⁷⁹

the preparation and uses of candrodaka (4.462–468),⁹⁸⁰ kartarītoya (4.469–473),⁹⁸¹ viṣodaka and ghr̥tadaka (4.474–478),⁹⁸² sarṇjīvanajala (4.479–485),⁹⁸³ śailodaka (4.486–495),⁹⁸⁴ tṛṇodaka (4.496–503),⁹⁸⁵ and uṣṇodaka (4.504–505);⁹⁸⁶

four types of ahiphena, of different colours, deriving from various types of marine animals; their uses in alchemy (4.506–508); another type of ahiphena, black in colour,

deriving from the plant khasakhasa, growing in Miśradeśa (i.e., Egypt); its characteristics (4.509); the purification of ahiphena (4.510); the group of substances called malina, consisting of bhaṅgā, ahiphena and dhuttūra; these substances cure śītajvara and are helpful in the purification of mercury (4.511);

the ten mahāviṣas: kālakūṭa, meṣaśṛṅgī, dardura, halāhala, karkāṭa, granthi, hāridra, raktaśṛṅgī, kesara, and yama-daṁṣṭrā; three other mahāviṣas consist of the frothy saliva (phenaka) of three poisonous animals (4.513–514); the composition of the group called pañcāmṛta, useful in medicine and alchemy (4.515–516); yogavāhin poisons used for alchemical and rasāyana purposes (4.517); their doses (4.518); the three main mahāviṣas: śṛṅgī, vatsanābha and kālakūṭa; the remaining poisons are upaviṣas (4.519); the three types of śṛṅgī (4.520); the description, according to another authority, of the two types of śṛṅgī: white and red (4.521–522); another authority again distinguishes three types of śṛṅgī: red, yellow and black; their uses in alchemy and medicine (4.523–524); the shape of meṣaśṛṅgī; its uses in alchemy and medicine (4.525); the eight poisons to be employed in processing mercury: saktuka, mauṣṭika, kaurma, dārvika, sārṣapa, saikata, vatsanābha, and śvetaśṛṅgī (4.526); the characteristics and uses of saktuka (4.527), mauṣṭika (4.528), kaurma (4.529), dārvika (4.530), sārṣapa (4.531), saikata (4.532),⁹⁸⁷ vatsanābha (4.533–534),⁹⁸⁸ kālakūṭa (4.535),⁹⁸⁹ halāhala (4.536), hāridra (4.537),⁹⁹⁰ and yama- or śvadaṁṣṭrā (4.538);⁹⁹¹ three methods of purifying poisons (4.539–542); drugs counteracting the intensity of the toxic effects of poisons (4.543); the killing of poisonous substances (4.544); therapeutic actions of poisonous substances (4.545); the treatment required when the dose has been too large (4.546–547); the purification of svaṁakṣīrī; its therapeutic actions (4.548–549); the purification of viṣamūṣṭi (4.550), jepālaka⁹⁹² and kanaka (4.551); the preparation of keśataila (4.552–554),⁹⁹³ bolapiṇḍa (4.555–558), kumārīrasa (4.559), and vṛkṣasattva (4.560–568);

nine methods of preparing the druti of mica (4.569–606), three methods for that of gold (4.607–616), a tenth method for that of mica (4.617–623), one method for that of māṁṣika (4.624–625), two methods for that of metals and their sattvas (4.626–630), one method for that of vaikrānta and some other substances (4.631–632), one method for that of pearls and other gems (4.633–634); the preparation of mixtures of drutis and mercury (4.635–637); the dose and the action of such a mixture (4.638–640);

the group of mañirasas: rājāvarta, tuttha, mauktika (pearl), vidrūma (coral) and vaikrānta (4.641); the gems used in the bandha of mercury: vaikrānta, sūryakānta, hīraka (diamond), mauktika, candrakānta, rājāvarta, puṣparāga, nīla, padmarāga, pravāḷaka (coral), and vaiḍūrya (4.642–643);⁹⁹⁴ the group of nine gems: puṁvājra (male diamond), garuḍodgāra, māṇikya, vāsavopala,⁹⁹⁵ vaiḍūrya, puṣpa(rāga), go-meda, mauktika, and pravāḷa (4.644); the mahāratnas are five, the uparatnas four in number; the uparatnas are: pravāḷa, garuḍodgāra, vaiḍūrya and puṣparāga (4.645); the nine gems associated with the nine grahas are: māṇikya, muktāphala, vidrūma, tārkṣya, puṣpa(rāga), bhidura (diamond), nīla, gomedaka, and vidūraka; the nine grahas are, in the same order, sun, moon, Maṅgala (Mars), Budha (Mercurius), Brhaspati (Jupiter), Śukra (Venus), Śani (Saturn), Rāhu, and Ketu (4.646–647);⁹⁹⁶ gems with auspicious characteristics and of the right jāti should be selected for the

purpose one has in mind (4.648);⁹⁹⁷

the two types of māṇikya (ruby); its four varieties (4.649); the characteristics of suitable rubies (4.650–651);⁹⁹⁸ rubies suitable to be used in processing mercury (4.652); the eight defects of rubies (4.653);⁹⁹⁹ the medicinal actions of rubies (4.654);¹⁰⁰⁰ the eight types of muktāphala (pearl) (4.655–656); pearls suitable for alchemical purposes (4.657);¹⁰⁰¹ defects of pearls (4.658);¹⁰⁰² the medicinal actions of pearls (4.659); characteristics of suitable and unsuitable types of pravāla (= vidrūma; coral) (4.660–661);¹⁰⁰³ coral needs purification before medicinal use (4.662); the medicinal actions of coral (4.663–665); the four types of garuḍodgāra (emerald) (4.666); emeralds suitable for alchemical uses (4.667); the seven good qualities of emeralds (tārṅśya) (4.668);¹⁰⁰⁴ defects of emeralds (4.669);¹⁰⁰⁵ the medicinal actions of emeralds (4.670);¹⁰⁰⁶ the eight good qualities of a puṣparāga (topaz) (4.671);¹⁰⁰⁷ bad features (4.672);¹⁰⁰⁸ the medicinal actions of topazes (4.673);¹⁰⁰⁹ the two types of nīla (sapphire), their characteristics and relative merits (4.674);¹⁰¹⁰ the seven good qualities of sapphires (4.675);¹⁰¹¹ the characteristics of the sapphire called mahānīla (4.676); the seven defects of sapphires (4.677–678);¹⁰¹² the medicinal actions of sapphires (4.679);¹⁰¹³ the origin of the gomeda (cinnamon stone); the eight good qualities of gomedas (4.680–681); the defects of gomedas (4.682);¹⁰¹⁴ the medicinal actions of gomedas (4.683);¹⁰¹⁵ the characteristics of a good marakata (a kind of emerald) (4.684); the defects of marakatas (4.685); the medicinal actions of marakatas (4.686); the characteristics of a vaiḍūrya (cat's eye) (4.687); the medicinal actions of vaiḍūryas (4.688); the defects of vaiḍūryas (4.689);¹⁰¹⁶ the characteristics of the rasonikā (a kind of cat's eye) (4.690);¹⁰¹⁷ its curative actions (4.691); the characteristic features of the garuḍodgārapāṣāṇa¹⁰¹⁸ (4.692–693); the curative virtues of this rare and priceless gem (4.694); although unpurified gems do not show adverse effects on administration, they should yet be purified for the increase of their therapeutic virtues (4.695); methods to purify each of the gems (4.696–697);¹⁰¹⁹ the killing of gems (4.698–701);

the extraction of oils in general (4.702);¹⁰²⁰ the extraction of an oil from dhātūra seeds (4.703–705);¹⁰²¹ the same methods apply for the extraction of an oil from the seeds of śigru, muṣkaka, kārpaśa, apāmārga and palāśa (4.706–707);¹⁰²² the extraction of an oil from the seeds of āṅkola, kākatuṇḍī, bākucī and devadālī (4.708);¹⁰²³ from viṣamuṣṭi and jaipāla (4.709);¹⁰²⁴ āragvadha (4.710);¹⁰²⁵ from the seeds of kaṭutumbī, devadālī, paṭolī, indravāruṇī and tiktakoṣātakī (4.711); kaṭutumbī (4.712);¹⁰²⁶ mahākāla (4.713–714);¹⁰²⁷ from pippalī and the seeds of kākatuṇḍī (4.715);¹⁰²⁸ from the seeds of karañja (4.716), palāśa (4.717);¹⁰²⁹ guñjā (4.718);¹⁰³⁰ jyotiṣmatī (4.719);¹⁰³¹ badara and harītakī (4.720); āmrāḍa (4.721); putrañjīva and raktabhija (4.722);¹⁰³² bilva (4.723);¹⁰³³ kola (4.724–726);¹⁰³⁴ from human hairs (keśatāila) (4.727–728);¹⁰³⁵ the extraction of oils from seeds by means of the heat of the sun (4.729–730);¹⁰³⁶ extraction by means of a pātālayāntra or garbhayantra (4.731–732).¹⁰³⁷

The order of the diseases in the *Āyurvedasaukhya* is generally the same as in the *Mādhavanidāna*, apart from some additions and minor changes.¹⁰³⁸ The prescriptions are partly of an āyurvedic, partly of a iatrochemical type. Religious and magical elements are rather frequent in Ṭoḍara's therapeutics.¹⁰³⁹

The text contains some passages in prose which are borrowed from commentaries or other works in prose.¹⁰⁴⁰ Many subjects, related in some way to therapeutic prescriptions, are dealt with at some length, e.g., sleep and prescriptions inducing sleep, etc. (III: 4.1290–1327), caustics (kṣāra; IV: 3.213–239), the purification of śilājatu (IV: 6.119–128), śirobasti (V: 11.309–314), netrabasti (V: 11.316–323), the uses of laṣuna, i.e., garlic (V: 11.569–595), tailapāka, i.e., the preparation of medicated oils (V: 11.801–806), a list of drugs to be purified before medicinal use (V: 11.807–810), a list of drugs to be freshly collected (V: 11.811–814), lists of plants the wood, roots, leaves, flowers, fruits, etc., of which are used in medicine (V: 11.822–835), three groups of fragrant drugs to be added to medicated oils (V: 11.836–847),¹⁰⁴¹ rules for the purification of a long series of drugs (V: 11.868–981), etc.

Sources and authorities quoted or referred to in volumes III–V are:¹⁰⁴² Agastya,¹⁰⁴³ Agniveśa,¹⁰⁴⁴ *Aṣṭāṅgakāṇḍa*,¹⁰⁴⁵ the Aśvins, Ātreya,¹⁰⁴⁶ Bhāluki, Bhāradvāja, Bhāskara,¹⁰⁴⁷ *Bhāvānīmata*,¹⁰⁴⁸ *Bhāvasvabhāva*,¹⁰⁴⁹ Bhela, Bhoja, Bhrgu,¹⁰⁵⁰ Bindusāra, Bodhisattva,¹⁰⁵¹ Brahmā,¹⁰⁵² Brahmasuta,¹⁰⁵³ *Brhadātreya*,¹⁰⁵⁴ Cakrapāṇi,¹⁰⁵⁵ Caraka,¹⁰⁵⁶ Carpaṭi, *Cikitsākalikā*,¹⁰⁵⁷ *Cikitsākalikāṭikā*,¹⁰⁵⁸ *Cintāmaṇi*,¹⁰⁵⁹ Daṇḍapāṇi, Dhūrjaṭi,¹⁰⁶⁰ *Dravyaguṇamālā*,¹⁰⁶¹ Gadādhara,¹⁰⁶² *Gandhapradīpapatrīkā*, *Gandhatantra*, Gopura, Gorakṣa,¹⁰⁶³ *Haramekhalā*, Hariścandra, Hārīta,¹⁰⁶⁴ Indra,¹⁰⁶⁵ Jālandhara,¹⁰⁶⁶ Jayadatta,¹⁰⁶⁷ Jejjāta,¹⁰⁶⁸ *Kakṣāputi*, *Kalyāṇakāraka*, *Kaṇiṣṭhātreya*, Kāṅkāyana, Kapila,¹⁰⁶⁹ Kārtavīrya, Kāśyapa,¹⁰⁷⁰ Kathaṇḍinātha,¹⁰⁷¹ Kharanāda, Kṛṣṇātreya,¹⁰⁷² Lāyikā,¹⁰⁷³ *Madhyamātreya*, Mahābhairavanātha,¹⁰⁷⁴ Mahādeva,¹⁰⁷⁵ Manthānabhairava, Matimukura, Mrtyuñjaya,¹⁰⁷⁶ Nāgārjuna,¹⁰⁷⁷ *Nakṣatramālā*,¹⁰⁷⁸ Nala,¹⁰⁷⁹ Nārada,¹⁰⁸⁰ Nityanātha, Nivāraṇa,¹⁰⁸¹ Pālakāpya, Parāśara, *Parimalapradīpa*,¹⁰⁸² Pārvatī, Pauskalāvata, Pūjyapāda,¹⁰⁸³ *Rājahaṃsa*,¹⁰⁸⁴ *Rasādīpikā*, *Rasālaṃkāra*, *Rasarahasya*, *Rasarājahaṃsa*,¹⁰⁸⁵ *Rasarājalakṣmī*, *Rasaratnākara*, *Rasaratnapradīpa*, *Rasaratnāvalī*,¹⁰⁸⁶ *Rasārṇava*, *Rasasāgara*, *Rasasāra*, *Rasasindhu*, *Rasāvatāra*, *Ratnākara*, *Rugvinīścāya*,¹⁰⁸⁷ *Śaivāgama*,¹⁰⁸⁸ *Śaivālabhākṣa(ṇa)mata*,¹⁰⁸⁹ *Śaivasiddhānta*, Śālihotra, *Samnipātakalikā*,¹⁰⁹⁰ *Sārasaṃgraha*, *Siddhasāra*,¹⁰⁹¹ Śiva, *Śivāgama*,¹⁰⁹² *Śivarahasya*,¹⁰⁹³ *Smṛtiśāstra*, *Śrīnivāsaśaṃhitā*,¹⁰⁹⁴ *Sūdasāstra*, Suśeṇa,¹⁰⁹⁵ Suśruta,¹⁰⁹⁶ *Sūtamahodadhī*, *Sūtārṇava*, *Svacchandāgama*,¹⁰⁹⁷ *Svacchandaśaktyāgama*,¹⁰⁹⁸ *Tottala*,¹⁰⁹⁹ Vāgbhaṭa,¹¹⁰⁰ *Vaidyālaṃkāra*,¹¹⁰¹ Varuṇa,¹¹⁰² Vāsudeva,¹¹⁰³ Videha, Vīrabhadra,¹¹⁰⁴ Viṣṇu, *Vṛddhasuśruta*, *Vṛddhātreya*, Vṛnda, Vṛndāraka,¹¹⁰⁵ Vyāḍi, Yadunandana,¹¹⁰⁶ and *Yogaratanāvalī*.

Sources and authorities quoted or referred to in Volume VI are: Agniveśa, *Aṣṭāṅgakāṇḍa*,¹¹⁰⁷ the Aśvins,¹¹⁰⁸ Ātreya, Bhaṭṭarāmamiśra,¹¹⁰⁹ Bhoja, Caraka, Gopura, *Gorakṣamata*,¹¹¹⁰ Jejjāta, Jivaka,¹¹¹¹ Kāṅkāyana,¹¹¹² Kapila,¹¹¹³ Kharanāda, Kṛṣṇātreya, Pinākin (i.e., Śiva),¹¹¹⁴ Pūjyapāda,¹¹¹⁵ *Rasarājalakṣmī*, Śaṃkara (i.e., Śiva),¹¹¹⁶ Suśruta, Tārā,¹¹¹⁷ *Vaidyasuradruma*,¹¹¹⁸ and Vaitaraṇa.

Volume VII ascribes recipes to the following authorities: the Aśvins (12.116–121; 15.49–55), Brahmā (16.325–330), Dhanvantari (12.147–148), Kāśyapa (16.308–313), Kṛṣṇātreya (14.47–52), Mahādeva (5.251–264), and Vaidyanātha (5.144). Suśruta is referred to on the subject of the number of eye diseases (16.4–8) and the dimensions of the eye (16.9–10).

Volume VIII ascribes recipes to the Aśvins (4.33–47; 6.21–28; 10.62–68 and 70–

80), Ātreya (1.28–33), Bharadvāja (6.34–42), and Kāśyapa (8.93). Rāvaṇa's *Kumāratantra* forms part of chapter seven on children's diseases.¹¹¹⁹ Large parts of chapters twelve to fifteen were borrowed from the *Śārṅgadharasamhitā*.

Volume IX quotes from or refers to: Agniveśa,¹¹²⁰ Amogha,¹¹²¹ āmnāyavi-
daḥ,¹¹²² Ātreya,¹¹²³ Bhadrāsauṇaka,¹¹²⁴ Bhairava,¹¹²⁵ *Bhavānīmata*,¹¹²⁶ Bhela,¹¹²⁷
Bhoja,¹¹²⁸ *Brhadātreya*,¹¹²⁹ Candranandana,¹¹³⁰ Candrāṭa,¹¹³¹ *Candrikā*,¹¹³² Cara-
ka,¹¹³³ *Cintāmaṇi*,¹¹³⁴ *Cūdāmaṇi*,¹¹³⁵ *Ḍalhaṇa*,¹¹³⁶ Dhūrjati,¹¹³⁷ *Dravyaguṇamālā*,¹¹³⁸
Gopura,¹¹³⁹ Gopurarakṣita,¹¹⁴⁰ *Gorakṣamata*,¹¹⁴¹ *granthāntara*,¹¹⁴² Hārīta,¹¹⁴³ Jaijja-
ṭa,¹¹⁴⁴ Jālandhara,¹¹⁴⁵ Jivānātha,¹¹⁴⁶ Kākacaṇḍeśvara,¹¹⁴⁷ *Kākacaṇḍeśvaratantra*,¹¹⁴⁸
Kakṣāpuṭi,¹¹⁴⁹ *Kalpaprādīpa*,¹¹⁵⁰ Kāśyapa,¹¹⁵¹ Kharanāda,¹¹⁵² Kṛṣṇātreya,¹¹⁵³ Kṣāra-
pāṇi,¹¹⁵⁴ *Kṣīrasindhu*,¹¹⁵⁵ *Lohapaddhati*,¹¹⁵⁶ Māṇḍava,¹¹⁵⁷ matāntara,¹¹⁵⁸ Mohāpā-
la,¹¹⁵⁹ Nāgārjuna,¹¹⁶⁰ Nala,¹¹⁶¹ *Nandikācāryatantra*,¹¹⁶² Pārāśara,¹¹⁶³ Patañjali,¹¹⁶⁴
Prayogapārijāta,¹¹⁶⁵ *Purandararahasya*,¹¹⁶⁶ Puṣkalāvata,¹¹⁶⁷ *Rājahamṣa*,¹¹⁶⁸ *Rasaci-
ntāmaṇi*,¹¹⁶⁹ *Rasacūdāmaṇi*,¹¹⁷⁰ *Rasadarpaṇa*,¹¹⁷¹ *Rasakāmadhenu*,¹¹⁷² *Rasālaṃkā-
ra*,¹¹⁷³ *Rasāṅkuṣa*,¹¹⁷⁴ *Rasapradīpa*,¹¹⁷⁵ *Rasarahasya*,¹¹⁷⁶ *Rasarājahamṣa*,¹¹⁷⁷ *Rasārā-
jalakṣmī*,¹¹⁷⁸ *Rasaratnākara*,¹¹⁷⁹ *Rasaratnasamuccaya*,¹¹⁸⁰ *Rasārṇava*,¹¹⁸¹ *Rasasāga-
ra*,¹¹⁸² *Rasasāra*,¹¹⁸³ *Rasasāstra*, *Rasasiddhānta*,¹¹⁸⁴ *Rasasindhu*,¹¹⁸⁵ *Rasavātāra*,¹¹⁸⁶
Rasendramaṅgala,¹¹⁸⁷ *Ratnadīpikā*,¹¹⁸⁸ *Ratnākara*,¹¹⁸⁹ Rūpāyana,¹¹⁹⁰ *Śaivāgama*,¹¹⁹¹
Śaivālabhākṣa,¹¹⁹² *Śārṅgadharma*,¹¹⁹³ Śaunaka,¹¹⁹⁴ Siddha Nāgārjuna, *Siddharatnāka-
ra*,¹¹⁹⁵ *Siddhasāra*,¹¹⁹⁶ *Sindūrārāṇa*,¹¹⁹⁷ *Śivāgama*,¹¹⁹⁸ *Śivamekhalā*,¹¹⁹⁹ *Śivarahasya*,
Suśruta,¹²⁰⁰ Svachchanda,¹²⁰¹ Tottala,¹²⁰² Vācaspati,¹²⁰³ Vāgbhaṭa,¹²⁰⁴ *Vaidyālaṃ-
kāra*,¹²⁰⁵ Varāhamihira,¹²⁰⁶ Vasiṣṭha,¹²⁰⁷ Viśvāmitra,¹²⁰⁸ *Vṛddhabhoja*,¹²⁰⁹ *Vṛddha-
hārīta*,¹²¹⁰ *Vṛddhasaunaka*,¹²¹¹ *Vṛddhasuśruta*,¹²¹² and *Vṛddhavahāda*.¹²¹³

Other works and authorities quoted in the *Āyurvedasaukhya* are:¹²¹⁴ *Ativiśādi*,
Haihaya,¹²¹⁵ Nāgodara,¹²¹⁶ *Pratāpālaṃkāra*,¹²¹⁷ *Rogamurāri*,¹²¹⁸ Romavedha (?),
Trailokyadambara,¹²¹⁹ and *Udakamañjarī*.¹²²⁰ According to P. Peterson,¹²²¹ the
compilers also consulted the work of Kuntīsuta.¹²²²

Vol. IX quotes the *Rasārṇava* much more often than indicated in the text. Works
cited without any reference to them are the *Rasendracintāmaṇi* and *Rasendracūdā-
maṇi*.¹²²³ Other sources left unmentioned are probably Cakrapāṇidatta's *Cikitsā-
samgraha*¹²²⁴ and Cāmuṇḍa's *Jvaratimirabhāskara*.¹²²⁵ Many verses found in the
Āyurvedasaukhya form also part of Bhāvamīśra's *Bhāvaprakāśa*.¹²²⁶

The *Ṭoḍarānanda* is quoted in Ananta's *Pratāpakalpadruma*, the *Āyurvedīya
Khanijavijñāna*, Dattarāma's *Bṛhadrasarājasundara*, Gulrājśarmamīśra's commentary
on the *Āyurvedaparakāśa*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpi-
pakvarasanirmāṇavijñāna*, Nirañjanaprasāda Gupta's *Pāradasamhitā*, the *Pākāmava*,
Rāmaprasāda's *Rasendrapurāṇa*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*,
Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,
Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Vācaka Dīpacandra's
Laṅghanapathyanirṇaya.¹²²⁷ It was one of the sources of Kalyāṇa's *Bālatantra*
according to Dīpacandra.¹²²⁸

Special features

Volume I does not contain new material when compared with its sources.

Volume II. Chapter one: the science of āyurveda is said to have been divided into eight branches by Kālamardana (1.14); śalya (surgery) is mentioned first in the list of these eight āṅgas of āyurveda; the division of āyurveda into nine branches, as found in the *Hārītasamhitā*, with the addition of bastīcikitsā, called agada, is referred to and rejected (1.37–40). Chapter two: the description of the five kinds of vāyu, according to the *Vivekamārtanḍa* (2.8–12), diverges from what is usually found in āyurvedic treatises; interesting are the accounts of āma (2.87–106) and prakṛti (2.203–229). Chapter three: noteworthy are the verses on pācana and dīpana drugs (3.25–42), vīrya (3.81–83), the explanation of a disagreeing vipāka (3.107), two types of prabhāva (hita and ahita; 3.111), pollution of country, water and air (3.236–250), the regimen for day and night (3.262–355), the examination of a patient's strength (balaparīkṣā; 3.359–390) and sātmya (3.391–411).

Chapter four is full of interesting details on metabolism and the physiology of the reproductive organs, embryology, pregnancy, and allied subjects; the verses on anatomy mention the length of the intestine in the male and female (4.235), the function of the phupphusa (4.238), and ten apertures (randhra) of the male body (4.263);¹²²⁹ the verses on the seven layers of the skin and their thickness (in agreement with Su.Śā.4.4) are ascribed to Vasiṣṭha. Chapter five: the description of a kālacakra for ascertaining the span of life left to a patient (5.30–35) probably derives from a Tantric source; patients who are going to die are said to be no longer able to see the three steps of Viṣṇu, i.e., Arundhatī, Dhruva and the heavenly Gaṅgā (i.e., the Milky Way), nor the Mātṛmaṇḍala (5.63–64). Chapter six: the verses on nāḍīparīkṣā are said to be from Ātreya, Caraka and *Vṛddhahārīta*, those on mūtraparīkṣā from Carpaṭi, Gopura, Hariścandra, Nāgārjuna and the *Sivāgama*,¹²³⁰ those on malaparīkṣā from the *Rudratāntra*; jīhvā- and dantaparīkṣā are said to have been described and propagated by Hārīta in conformity with Brahmā's teachings; nakhaparīkṣā derives from Brahmā; the parīkṣā scheme of the *Āyurvedasaukhya* differs from the more usual aṣṭasthānaparīkṣā, danta- and nakhaparīkṣā being uncommon elements; seven morbid affections of the teeth are described (6.103); several ways of predicting the date of death are described according to a number of Tantric texts (*Narapaticaryā*,¹²³¹ *Rasārṇava*, *Yogarātnāvalī*, *Śrīnivāśasamhitā*).

Volume III. One series of thirteen saṃnipāta fevers is described: sandhiga, antaka, rugdāha, cittavibhramṣa or -bhrama, śītāṅga, tandrika, kaṇṭhakubja, karṇika, hāridra(ka), bhugnanetra, raktaṣṭhīvin, pralāpaka, and jīhvaka (4.264–532). The fever called abhinyāsa has been added to this series (4.557–691). Usually, this sequence of fevers ends with abhinyāsa¹²³² and does not include hāridra. ¹²³³ The number of days during which these fourteen fevers endanger the life of a patient is mentioned in a separate list (4.259–262).¹²³⁴ The descriptions partly agree with those found in Cāmuṇḍa's *Jvaratimirabhāskara*,¹²³⁵ another part deriving from some unknown source.¹²³⁶ Three fevers which in other treatises belong to a separate series of saṃnipāta fevers, phalgu, pākala and phupphunaka, are regarded as varieties of respectively śītāṅga and tandrika (4.533–536);¹²³⁷ a fever, described in the same context and called vaidārikakarma (4.538–539),¹²³⁸ may be related to the vaidārika of other texts.¹²³⁹ Reversed types are described of cāturthaka, tṛtīyaka, satata and

anyedyuṣka fever (4.752–759); a synonym of cāturthaka is praskandina. The fevers called raudrajvara,¹²⁴⁰ mähendrajvara, jvareṣvara, kälajvara and gambhīrajvara¹²⁴¹ are said to derive from *Kaniṣṭhātreyā*.

Volume IV. The chapter on atisāra has verses on four doṣic types of pravāhikā (1. 26–28), on jvarātisāra (1.31–67), diarrhoea occurring during the puerperium (prasūtidoṣṭha; 1.132–134), and on the therapy of prolapse of the rectum (1.195–199). The chapter on grahaṇī describes the varieties of this disorder called saṃgrahagrahaṇī (2. 22) and ghaṭīyantragrahaṇī (2.23), that on agnimāndya the bhasmaka type of the digestive fire (4.14–16 and 41–42) and the disease called daṇḍakālasaka (4.33–34). The chapter on pāṇḍuroga describes the variety of jaundice called pānakī (6.25) and the purification of śilājatu (6.119–128).

Volume V. The chapter on vātavyādhi describes prāṇyāma (11.125), ūrdhvacāta (11.131), śītavāta (11.133) and kaṭigraha (11.144) as separate disease entities; it also mentions the diseases called jhīñjīrī (11.228),¹²⁴² āṅgulivāta (11.435), prasūtivāta (11.491), and pārśvavāta, also called paśūrikā (11.799);¹²⁴³ the term ādhyavāta occurs rather frequently as a synonym of both vātarakta (11.38, 268, 538) and ūrustambha (13.5; 14.82). The chapter on vātavyādhi contains a list of drugs that should be purified before using them in recipes (11.807–810) and a list of drugs that should be freshly collected (11.811–814). Groups of drugs are enumerated of which the wood (11.822), leaves (11.823–824), fruits (11.925–827), barks (11.828), exudates (11.830), roots (11.833–834) and flowers (11.835) are used in medicine. Fragrant substances employed as additives to medicated oils are divided into three categories: udāsīna (neutral), śatru (unfriendly) and mitra (friendly) (11.838–843). Some verses (11.848–854) are devoted to the process known as vedha (potentiation) in the science of perfumery. The purification of a number of fragrant substances is described according to the *Gandhatantra* (11.866–980).

Volume VI. The chapter on śūla contains descriptions of different forms of this disorder (1.15–25), taken from the *Suśrutasaṃhitā*. Chapter two employs the term jarat-pitta both as a synonym of annadravaśūla (2.12) and as designating a disorder that differs from the latter (2.51).¹²⁴⁴ Chapter eight mentions (8.41) the prostate (pauruṣa) according to the translators, but, the prostate being unknown in āyurvedic literature, pauruṣa can better be translated as penis. Chapter nine adds two types of prameha to the usual series of twenty: khaṭikāmeha (9.22) and pūyameha (9.23). A separate chapter (10) is devoted to kṛṣaroga. Chapter fourteen, on vṛddhi, differentiates kuraṇḍa from vṛddhi (14.11) and describes bradhma as a separate disease (14.10). Chapter seventeen includes a description of stanavidradhi (mammary abscess; 17.30–31). Chapter eighteen contains a characterization of raktapāka (18.12–13) and includes the description and treatment of agnidagha (burns; 18.110–130).

Volume VIII. Three mantras are added to the text of Rāvaṇa's *Kumāratantra*, addressed to Rudra and Khadgarāvaṇa. The chapter on rasāyana contains a number of kalpas.

Volume IX. A rarely mentioned substance described is brahmapiśācikā (4.262–264); a rarely mentioned gem is rasonikā (4.690–691).

Noteworthy names of medicinal plants in Volumes III–IX¹²⁴⁵ are: ābhā (V: 11.350,

484, 503, 520),¹²⁴⁶ ajabhārī (IX: 4.392),¹²⁴⁷ ambhodhivṛkṣa (IX: 1.536),¹²⁴⁸ amilāna (VIII: 10.99),¹²⁴⁹ amlaparnī (IX: 2.333),¹²⁵⁰ aśokī (V: 11.839),¹²⁵¹ bahupatrā (VIII: 8.194),¹²⁵² bhīrupatrī (IX: 4.387),¹²⁵³ brahmabīja (IX: 2.133; 4.637),¹²⁵⁴ brahma-kāṣṭha (IX: 3.114),¹²⁵⁵ candramāṁsī (IV: 3.286),¹²⁵⁶ candraprabhā (VI: 9.99),¹²⁵⁷ candrasūrya (V: 11.410),¹²⁵⁸ cettodhātṛī (III: 4.193),¹²⁵⁹ chikkaṇī (III: 4.371),¹²⁶⁰ chilahiṇḍikā (IX: 3.248),¹²⁶¹ cholaṅgapattra (V: 11.975),¹²⁶² coka (V: 11.699),¹²⁶³ cova (V: 11.670),¹²⁶⁴ daṇḍahastī (V: 11.839),¹²⁶⁵ dehulī (V: 11.839),¹²⁶⁶ dehulikā (V: 11.838), devakaṇḍarikā (IX: 3.223),¹²⁶⁷ dherā (III: 4.371),¹²⁶⁸ durvarṇa (V: 11.719),¹²⁶⁹ dvipabalā (V: 11.161),¹²⁷⁰ ekaparnī (IX: 3.35),¹²⁷¹ gajabalā (IX: 2.42),¹²⁷² gajakusuma (VII: 13.186),¹²⁷³ gartakalambukā (IX: 3.206 and 227),¹²⁷⁴ gartālābu (IX: 3.249),¹²⁷⁵ ghaṭābīja (III: 4.371),¹²⁷⁶ ghaṭākanda (IX: 4.415),¹²⁷⁷ gonarda (V: 11.828),¹²⁷⁸ hanumantikā (IX: 4.391),¹²⁷⁹ harikanda (VI: 1.26),¹²⁸⁰ haritālī (IX: 4.115),¹²⁸¹ harṣaṇī (V: 11.597),¹²⁸² hṛddhātṛī (III: 4.309, 425, 485, 587; V: 11.758 and 791),¹²⁸³ hṛtparnī (III: 4.661 and 959),¹²⁸⁴ huruhuru (III: 4.371),¹²⁸⁵ ikṣuparnī (V: 11.841),¹²⁸⁶ indrasurī (VI: 10.38),¹²⁸⁷ jalasūkarī (VIII: 10.159),¹²⁸⁸ jvālāmukhī (IV: 8.177; IX: 4.239),¹²⁸⁹ jyotsnikā (IV: 3.55 and 181),¹²⁹⁰ kabāba (IV: 3.286),¹²⁹¹ kā-kavallī (IX: 4.397),¹²⁹² kākinī (VI: 8.87),¹²⁹³ kālānī (VII: 17.95),¹²⁹⁴ kalāpavidalī (VI: 18.147),¹²⁹⁵ kapilikā (IX: 2.175),¹²⁹⁶ karpūrī (V: 11.944),¹²⁹⁷ kaṭhorā (IX: 3.238),¹²⁹⁸ kaṭuhuñcī (IX: 4.397),¹²⁹⁹ kebuba (V: 11.548),¹³⁰⁰ keṅkaṭī (V: 11.640),¹³⁰¹ khaṅgārī (IX: 4.390),¹³⁰² khaṇḍakarṇa (VII: 7.45),¹³⁰³ khurāsāna (VI: 9.126),¹³⁰⁴ kṣāranālī (IX: 4.387),¹³⁰⁵ kṣatrinī (III: 4.155; V: 11.812),¹³⁰⁶ kṣetradūtī (V: 11.811),¹³⁰⁷ kṣīrakañcukī (V: 11.357),¹³⁰⁸ kugarachinna (IX: 3.228),¹³⁰⁹ kukkuramardaka (III: 4.499),¹³¹⁰ kukurunda (III: 4.503 and 720),¹³¹¹ kunthaka (VI: 8.56),¹³¹² madhukulyā (VIII: 10.74),¹³¹³ mahāsamudrā (V: 11.833 and 838),¹³¹⁴ māṅgāraka (III: 4.623),¹³¹⁵ meṣakanda (III: 4.1120),¹³¹⁶ moraṭī (VII),¹³¹⁷ nameru (VI: 8.101),¹³¹⁸ pācya (VI: 8.87),¹³¹⁹ pālindī (VIII: 8.184),¹³²⁰ peyarī (IX: 4.386),¹³²¹ pītaveṇī (IX: 4.315, 607, 610, 628),¹³²² pīvarī (V: 11.709),¹³²³ potikā (IX: 13.81; 16.233),¹³²⁴ puṭapatrī (V: 11.809),¹³²⁵ rājakarṇa (IX: 3.35),¹³²⁶ raktadantī (IX: 4.390),¹³²⁷ raktavajrī (IX: 4.397),¹³²⁸ rasendravallī (VI: 1.125),¹³²⁹ reṣī (V: 11.808),¹³³⁰ rīthā (III: 4.371),¹³³¹ saddināra (III: 4.377),¹³³² śailakarṇī (V: 11.392),¹³³³ śailamuṣṭī (V: 11.922–923),¹³³⁴ śālaciñcā (IX: 3.227),¹³³⁵ śālīciñcī (IX: 3.248),¹³³⁶ śālūkatnī (IX: 4.429),¹³³⁷ sarjaparnī (VII: 5.200),¹³³⁸ śaśakapriya (V: 11.814),¹³³⁹ sirṇhavalī (IX: 4.388),¹³⁴⁰ śīrṣikā (V: 11.947–948),¹³⁴¹ sitisāra (VI: 6.26),¹³⁴² smāraṇī (IX: 3.59),¹³⁴³ srāviṇī (VII: 17.95),¹³⁴⁴ sthaliśakalā (V: 11.828),¹³⁴⁵ śūciṇṣuṣa (IX: 1.442),¹³⁴⁶ sukāma (V: 11.637),¹³⁴⁷ sukhāsprā (VIII: 4.6),¹³⁴⁸ surabhī (V: 11.976),¹³⁴⁹ suvirā (VII: 17.97),¹³⁵⁰ taja (V: 11.672),¹³⁵¹ tāra (IX: 4.398),¹³⁵² triśīras (III: 4.541),¹³⁵³ triśūlī (III: 4.874),¹³⁵⁴ udakarasā (IX: 4.385),¹³⁵⁵ uṣṇāmbu (VI: 1.121),¹³⁵⁶ vārāhakarṇī (IX: 4.386),¹³⁵⁷ veṇikā (IX: 1.517),¹³⁵⁸ verojā (VIII: 10.158),¹³⁵⁹ vibhīṣaṇa (V: 11.567–568),¹³⁶⁰ vīra (III: 4.502, 510, 1096),¹³⁶¹

The author

The *Ṭoḍarānanda*, attributed to Ṭoḍaramalla himself,¹³⁶² was actually prepared under his patronage by several scholars of Benares.¹³⁶³ Opinions differ as to whom the general editorship was entrusted. According to some this was Nārāyaṇa Bhaṭṭa,¹³⁶⁴ according to others it must have been someone else, Nārāyaṇa Bhaṭṭa being already advanced

in years at the time of compilation of the work.¹³⁶⁵ The name of Nārāyaṇa Bhaṭṭa is not mentioned anywhere in the *Ṭoḍarānanda*, but it is known for certain that at least one of its sections, the *Jyotiḥsauhya*, was composed by Nīlakaṇṭha, son of Ananta.¹³⁶⁶

Ṭoḍaramalla was the son of Bhagavatīdāsa,¹³⁶⁷ who died when his son was still very young. Ṭoḍara belonged to the Ṭaṇḍana clan, was a kṣatriya by caste, hailed from Oudh, and was born either at Laharpur or in Lahore at an unknown date. He is called Rājaṭoḍaramalla because he descended from the zamīndārs of Oudh.¹³⁶⁸

Ṭoḍara joined the service of Akbar in 1573, rose to the position of vazīr or dīwān in 1582, and died in 1589.¹³⁶⁹

Date

The *Ṭoḍarānanda* has been compiled during 1572–1589.¹³⁷⁰

Trilocana Kavicandra

Trilocana Kavicandra, the father of Kavikaṇṭhahāra,¹³⁷¹ was the author of a *Ratnāvalī*.¹³⁷² He belongs, as does his son, to the sixteenth or seventeenth century.

Vaidyārāja

Vaidyārāja was the author of the *Rasasārṇava* and *Sukhabodha*.¹³⁷³

The *Rasasārṇava*¹³⁷⁴ is a short treatise, probably mainly dealing with therapy; it also describes the examination of the pulse, the urine, and the eyes of the patient.¹³⁷⁵

The *Sukhabodha*¹³⁷⁶ is a comprehensive work on therapeutics, written in a clear and easy style. The beginning, describing the descent of āyurveda, is inspired by the *Carakasamhitā*.

Sources mentioned at the end of the work are: Caraka, Madanavinoda, Paṇḍitaśā, Rasadīpikā, Rasakalikā, Rasamañjarī, Rasaprayoga, Rasaratnākara, Rasendracintāmaṇi, Rasendrakalpadruma, Sārasaṃgraha, Śārīgadhara, Suśruta, Vāgbhaṭa, and Vāṇīgasenaka.

Quoted in the body of the work are: the *Agnipurāṇa*, *Garuḍapurāṇa*, *Gopālasaṃhitā*,¹³⁷⁷ Rāvaṇa's *Kumāratāntra*, Vāsudeva, Viṣṇu, and the *Sāralatikā*.¹³⁷⁸

The author gives his genealogy at the beginning and end of his work. He was a son of Viśārada, son of Vaidyacintāmaṇi, son of Vaidyavācaspati, son of Yadunātha; he was a nephew of Ratnamaṇi.¹³⁷⁹ The *Sukhabodha* was completed in the year 1624 of an unspecified era, i.e., in 1567/68 or 1702/03.¹³⁸⁰

Yaśaḥkīrti

Yaśaḥkīrti was the author of the *Jagatsundarīprayogamālā*,¹³⁸¹ a work on therapy,¹³⁸² written in 1,500 Prakṛit verses (gāthā),¹³⁸³ arranged in forty-two or forty-three chapters.

The treatise is especially valuable for its description of fifteen yantras with rather unusual names: airāvaṇa-, bāṇagaṅgā-, bheruṇḍa-, gaṅgā-, gatapratyāgata-,

haṃsaśravā-, jaladurgabhayānaka-, mahā-, meghanādabhramaṇavarta-, pāṇḍavāmalī-,
rājābhyudaya-, vāyu-, vidyādharaṇḍī-, vidyādharaṇḍī-, and vidyādharaṇḍī-yantra.¹³⁸⁴

Yaśaḥkīrti was a Jain, and a pupil of Vimalakīrti, in his turn a pupil of Rāmakīrti,
of the Bāgada śaṅgha.¹³⁸⁵ He is usually placed in the sixteenth century.¹³⁸⁶

Chapter 2

Seventeenth-century authors and works

The *Anūparudrākṣādīparīkṣā*

The *Anūparudrākṣādīparīkṣā* was written by a court poet at the instance of king Anūpasimpha of Bīkāner (A.D. 1674–1709).¹

Bharatamallika

Bharatamallika² was the author of two works on the genealogy of the Vaidya families of Bengal, the *Candraprabhā*³ or *Vaidyakulapañjikā*,⁴ and the *Ratnaprabhā*.⁵ He also wrote two medical treatises, the *Ratnakaumudī*⁶ and *Sārakaumudī*.⁷

Bharatamallika was a prolific author.⁸ Apart from the works already mentioned, he wrote commentaries on the *Amarakoṣa*,⁹ *Bhaṭṭikāvya*, *Kumārasaṃbhava*, *Raghuvamśa*, *Kirātārjunīya*, *Śiśupālavadha*, and Śrīharṣa's *Naiṣadhacarita*. He also commented on the *Meghadūta*, *Ghaṭakarpara*, *Nalodaya*, and *Gitagovinda*. His other works are the *Drutabodha* and its commentary, the *Drutabodhinī*,¹⁰ on grammar, and a series of smaller treatises, the *Ekavarṇārthasaṃgraha*,¹¹ on monosyllabic homonyms, *Dvirūpadhvanisaṃgraha*,¹² on words of various spellings, *Upasargavṛtti*,¹³ on the prepositions, *Sukhalekhana*,¹⁴ on orthography, and *Kārakollāsa*,¹⁵ on grammar.

The *Candraprabhā*¹⁶ contains a wealth of details on the prominent Vaidya families of Bengal, including the author's own family.¹⁷ Bharatamallika was already of advanced age during the period of its composition.¹⁸ It was completed in 1675/76, as indicated by the author himself.¹⁹

The period of Bharatamallika's literary activity may be fixed as lying between 1650 and 1680.²⁰

Bharatamallika was a son of Gaurāṅgamallika²¹ and descended from the family of Vaidya Harihara Khān.²² He belonged to the village Piṇḍira in the Hūglī district.²³ His forefathers lived in Śrīkhaṇḍa in the Bardvān division. Bharatamallika opened a school at Bhatrigrāma on the Ganges and taught a large number of students. His son was called Rāmacandramallika.²⁴ Bharatamallika was patronized by king Pratāpanārāyaṇa²⁵ of Bhūriśreṣṭha, who reigned in the second half of the seventeenth century.²⁶

Bhāskara

Bhāskara,²⁷ son of the physician Āpājibhaṭṭa,²⁸ who was a resident of Benares (Kāśīkṣetra), grandson of Haribhaṭṭa, great-grandson of Puruṣottamabhaṭṭa of the Agni-

hotrī family and of Kāśyapagotra, who lived at Tryambakeśvarapura²⁹ in Mahārāṣṭra, father of Jayarāma,³⁰ composed a treatise on human anatomy in 110 verses, called *Śārīrapadminī*.³¹ The work dates from 1678/79 and was provided with a commentary, called *Padminīprabodha*, by Vaidyanātha.³²

Other works by Bhāskara are the *Padyāmṛtatarāṅgiṇī*³³ (composed in 1676) and the *Smṛtiprakāśa*,³⁴ which is posterior to the *Śārīrapadminī* because it quotes from the latter.³⁵ Apart from the works already mentioned, Bhāskara wrote the *Adhyātmārāmāyaṇaprakāśa*,³⁶ *Bhāskaracaritra*,³⁷ *Gaṅgāstuti*,³⁸ *Lakṣmīstuti*,³⁹ *Paribhāṣābhāskara*,⁴⁰ *Śuddhiprakāśa*,⁴¹ *Vṛttaratnākarasetu*,⁴² and *Yaśavantabhāskara*.⁴³

Cidghanānandanātha

Cidghanānandanātha may have been the author of a *Ṣaṭkarmasaṅgraha*, sometimes ascribed to a Rāghava or Raghuvīra. This treatise is described as a work aiming at a synthesis between pañcakarman and ṣaṭkarman.⁴⁴ Medicinal plants, as well as yogic practices, are prescribed by the author for a number of diseases. The work may date from the seventeenth century.⁴⁵

Devīsiṃha

Devīsiṃha, son of Bharata or Hindupati, king of the Bundelā dynasty (seventeenth century), was the patron of Mohana Bhaṭṭa (author of the *Kaṃsavadhamahākāvya*),⁴⁶ the patron and disciple of Śivānanda Gosvāmin (author of the *Siṃhasiddhāntasindhu*),⁴⁷ and the patron of Durgādatta (author of the *Vṛttamuktāvalī*).⁴⁸ The medical (and astrological?)⁴⁹ work *Siṃhasudhānidhi* is ascribed to him; a *Pākaśāstra*, *Mallaśāstra* and *Śārīrāsthānasaṃdoha* are probably sections of this treatise.⁵⁰

Dharmavardhana

Dharmavardhana was the author of the *Ḍambhakriyā*,⁵¹ a short treatise in twenty-one verses on cauterization (ḍambha), written in Hindī.

The diseases mentioned as to be treated by this method are: jvara, saṃnipāta, atisāra, saṃgrahaṇī, pāṇḍu, golā,⁵² śūla, hṛdayaroga, śvāsa, kāsa, raktasrāva (haemorrhage), śiṛṣaśūla, netraroga, unṃādavāta, kaṭivāta, śītāṅgatā, mṛgīvāta (= apasmāra), kampavāta, śopha, udara, jalodara, aṇḍavṛddhi, and dhanurvāta.

Authorities referred to in the introductory verses are Caraka and Vāgbhaṭa.

Dharmavardhana, a Jain monk of the Kharataragaccha, was a pupil of Vijayahaṛṣa. He was called Dharmasī (= Dharmasiṃha) before his ordination (dikṣā) by Jinacandra-sūri. Mahārāja Sujānasīṃha of Bīkāner bestowed honour on him.⁵³

Gopāla

Gopāla was the author of a *Dravyagaṇa*,⁵⁴ composed in 1606, which quotes Cakrapāṇidatta's *Dravyagaṇa* and a Nārāyaṇa.⁵⁵

Hastiruci

Hastiruci was the author of a short collection of formulae, the *Vaidyavallabha*.⁵⁶

Contents

The treatise consists of about 250 verses⁵⁷ in eight chapters (vilāsa), each of which deals with a group of disorders. Chapter one contains recipes against fevers, chapter two against women's diseases, chapter three against various disorders, chapter four mainly against diseases of the urinary tract, chapter five mainly against diseases of the intestinal tract, chapter six against abdominal diseases, anaemia and jaundice, chapter seven mainly against diseases of eyes, ears, mouth and head, and chapter eight against bhūtas, pretas, poisons, and diverse disorders.⁵⁸

Hastiruci frequently mentions his name at the end of the formulae as the one who devised them.⁵⁹ A small number of recipes is provided with a name.⁶⁰

Sources are not referred to.⁶¹

(Hastiruci's) *Vaidyavallabha* was one of the sources of Pratiāpasiṃha's *Amṛtasāgara*.

Special features

Interesting names⁶² of disorders are: dhāturoga⁶³ in women (2.17); kapālākīṭaka, i.e., head lice (7.11); a kind of ulcer called nāsūra⁶⁴ (7.19); grānthivāta (7.36); mallaviṣa (8.5); mṛgī as a term for apasmāra (8.22–23); vīryasrāva, i.e., involuntary loss of semen (8.25);⁶⁵ pādavraṇa (8.26); jānukampa (8.29).⁶⁶ Although snāyuka was known to Hastiruci (7.24–27), he did not include recipes against other diseases added by Vṛnda and later authors, such as vardhma, phiraṅgaroga, somaroga, masūrī and śītalā. Chapter two contains not only a number of formulae which promote fertility in women and counteract abortion, but also some abortifacients (2.18–23) and contraceptives (2.26–31). Medicines against the poisonous effects of opium (nāgaphenaviṣa; 8.6) and mercury (rasaviṣa; 8.9ab) form part of Hastiruci's collection.

The pharmaceutical preparations are mostly of the classical types, with a rather small proportion of rasas; some pākas are also found in the work (5.16; 7.1–5 and 30–34; 8.18–20). Noteworthy is the frequent prescription of ākallaka (4.23; 5.18; 6.3; 7.3 and 35; 8.18, 34 and 39) and opium (ahipheṇa or nāgaphena; 4.19 and 24; 5.3 and 4; 6.12 and 17; 7.17; 8.6, 27, 30 and 39).

Interesting items from the materia medica are: brahmadarbha (8.30);⁶⁷ gundī (7.24);⁶⁸ gundīvrkṣa (8.25); jasada (8.30); jāśūsa (2.12 and 31); kāṇḍaḍī (8.30); kārelī (1.26; 2.31; 8.24);⁶⁹ khairasāra (6.15); mājūphala (7.20); mastakī (8.30 and 39); meṇa (8.26); sābun (8.26); sūryakṣāra (4.16);⁷⁰ tila (8.26).⁷¹ Honey, not allowed to Jains as an article of food, is freely prescribed in medicines by Hastiruci. The last recipe of the collection (8.38–40) is said to have been devised by Murādisāha.

A Sanskrit commentary on the *Vaidyavallabha* was written by the brāhmaṇa Meghabhaṭṭa of Gautamagotra in 1672/73. This Meghabhaṭṭa was a son of Nīlakaṇṭhabhaṭṭa, a grandson of Kṛṣṇabhaṭṭa, and a great-grandson of Nāgarabhaṭṭa.⁷²

The author

Hastiruci is described as a member of the Tapāgaccha and a disciple of upādhyāya or mahopādhyāya Hitarucigaṇi⁷³ in the colophon at the end of two BORI MSS (Nrs. 281 and 282). He lived in Gujarāt.⁷⁴

Date

Since one of the formulae of the *Vaidyavallabha* is ascribed to Murādisāha, we can infer that Hastiruci lived in the same period or later than Murāḍ, the younger brother of Aurangzīb, who was beheaded in 1661.⁷⁵ This dating is confirmed by the colophon of one of the BORI MSS (Nr. 281), which states that the work was completed in 1670/71.⁷⁶

Jagannātha

Jagannātha, son of Lakṣmaṇa of the Rāḍhā family,⁷⁷ was the author of a *Yogasamgraha*, composed in 1616.⁷⁸ This work refers to Rāvaṇa's *Bālatantra*, i.e., the *Kumāratantra*.⁷⁹

Jayaratna(maṇi)

Jayaratna⁸⁰ or Jayaratnamaṇi⁸¹ was the author of a monograph on fevers called *Jvaraparājaya*.

The work, consisting of 439 verses, deals, after some introductory stanzas (1–7), with the vessels of the body (śīrāprakaraṇa; 8–16), the doṣas (16–51), the origin of fevers (jvarotpatti prakaraṇa; 52–121), the different kinds of fever (122–156)⁸² and their therapy (157–224), clysters (bastikarmādhikāra; 225–369), substances which are salutary or insalutary in fevers (pathyāpathyādhikāra; 370–389), the sarṇipāta fevers (390–431), and the offering called pūrṇāhuti⁸³ (432–439).⁸⁴

Authorities referred to by the author are: Aṅgada,⁸⁵ Ātreya, Bhela, Caraka, Hārīta, Mādhava, Nāgasiṃha,⁸⁶ Pālakāpya, Pārāśara, Soḍhala, Suśruta, Tīsaṭa, Vāgbhaṭa, and Vṛnda.⁸⁷ Cāmuṇḍa's *Jvaratimirabhāskara* is quoted by Jayaratna.⁸⁸

The *Jvaraparājaya* is quoted in Karandikar's *Nidānāṭipikā*.

Jayaratna, a Śvetāmbara Jain,⁸⁹ was a pupil of Bhāvaratna.⁹⁰ He wrote his work in Tryambāvatī.⁹¹

The *Jvaraparājaya* was composed in the year 1605/06.⁹²

Kāśīnātha

Kāśīnātha was the author of a short monograph on indigestion called *Ajīrṇamañjarī*, *Amaṭamañjarī*, or *Ajīrṇāmañjarī*.⁹³

Contents

The treatise consists of sixty verses.⁹⁴ Verses 1–2 describe the four varieties of ajīrṇa distinguished by Suśruta,⁹⁵ verse 3 is about the general treatment, and verses 4–5

mention the number of days for aḥjṛṇa, caused by specified articles of diet, to disappear spontaneously.⁹⁶ Verses 6–47 deal with aḥjṛṇa brought about by a variety of substances and its treatment by means of countermeasures. The verses which follow are devoted to the alleviation of discomforts as a consequence of particular medical treatments⁹⁷ and by the overuse of caustic lime (cūrṇaka) in betel quids (48–52), the prevention of inconveniences resulting from the intake of alcoholic drinks (53–54), the treatment of intoxication by kodrava (55) and betel nuts (pūga; 56), the preparation of vasavāra and sūkta⁹⁸ (57–58), and the usefulness of the latter substance in indigestion by āma (59).

The *Ajṛṇamañjarī* is one of the sources of the *Pāradasaṃhitā*; it is quoted in the prakṛṇaka pariśiṣṭa of the *Ānandakanda*, the *Rasakāmadhenu*, and the *Rasayogasāgara*.

Commentaries on the *Ajṛṇamañjarī* were written by Rājānaka Bhagavanta,⁹⁹ Rāmanātha Vaidya,¹⁰⁰ and Bāladeva.¹⁰¹

Date

The lower limit of the age in which Kāśīnātha lived is provided by MSS dating from 1618,¹⁰² 1676/77¹⁰³ and 1694/95.¹⁰⁴

Kāśīnātha

Kāśīnātha, son of Śaṃkara and Rohiṇī, was the author of the *Kāśīnāthapaddhati*, also called *Vaidyakapaddhati* and *Āyurvedasāra*.¹⁰⁵ The treatise deals with all aspects of medicine: weights and measures, the examination of the pulse, the preparation of medicines, kālajñāna, the aetiology, symptomatology and treatment of diseases, emetics and purgatives, and, finally, the purification of metals, etc.¹⁰⁶

The work dates from A.D. 1665/66,¹⁰⁷ which implies that the author is different from the Kāśīnātha of the *Ajṛṇamañjarī*.

The *Kāśīnāthapaddhati* was one of the sources of the *Amṛtasāgara*.

Kavicandra

Kavicandra, son of Kavikarṇapūra and Kauśalyā, grandson of Vidyāviśārada (a vaidya of Sudhīra on the banks of the Ganges) of the Datta lineage, and the father of Kavibhūṣaṇa and Kavivallabha,¹⁰⁸ was the author of the *Cikitsāratnāvalī* or *Ratnāvalī*, written in Dīrghāṅgī or Dīrghāṅganagara¹⁰⁹ near Vaidyavatī on the Ganges in A.D. 1660/61. Although he does not mention by name any authority, Kavicandra has freely copied Caraka in the introduction, while later on, in the description of the diseases, he has followed Mādhava's *Rugviniścaya* from beginning to end.¹¹⁰

Kṛṣṇānanda Vidyāvāgīśa

Kṛṣṇānanda Vidyāvāgīśa, also called Śrīkṛṣṇavidyāvāgīśabhaṭṭācārya, was the author of the *Ṣaṭkarmadīpikā*.¹¹¹

Contents

The work is a Tantric treatise on *ṣaṭkarman* in about 1,000 verses, arranged in nine chapters (*uddeśa*). It is written in the form of a dialogue between Śiva and Pārvatī.

The titles of the chapters are: (1) *sāmānyadharmā*, general observances; (2) *kuṇḍā-diniyama*, general prescriptions on fire sacrifices, etc.; (3) *nānāprakāśāntinīyama*, the attainment of *śānti*, especially the preservation of health and the cure of diseases; (4) *vaśyakarman*, subjugation; (5–6) *stambhanakarman*, immobilization; (7) *ākaraṣaṇa*, attraction, and *vidveśa*, the sowing of dissension; (8) *uccāṭanavidhi*, eradication; (9) *māraṇa*, the killing of adversaries.

It is remarkable that not only chapter three, but also the series of chapters from three up to nine, are said to belong to a *śāntikalpa*. Chapter three contains verses on Tantric procedures aiming at curing several diseases, among which fever holds a prominent place; *Ātharvaṇa*, Garga, Hārīta, and the *Tantrarāja* are quoted on the subject of fevers.

The *Ṣaṭkarmadīpikā* has all the characteristics of a compilation and refers to a large number of mainly Tantric and Purāṇic sources by name.¹¹²

The author and his date

Kṛṣṇānanda Vidyāvāgīśa, a famous Tantric scholar,¹¹³ who also wrote the *Tantrasāra*,¹¹⁴ was a Varendra brāhmaṇa who lived in Navadvīpa.¹¹⁵ His works may have been composed in the seventeenth century.¹¹⁶

Lakṣmīkuśala

Lakṣmīkuśala was the author of the *Vaidyakaśāraratnaprakāśa*, written in Gujarātī verse (*caupāī*). Sources mentioned are the *Ātreyanidāna* and *Suśrutasastra*.

Lakṣmīkuśala was a pupil of Jinakuśala of the Tapāgaccha. He completed his treatise in A.D. 1637 and lived in a village called Oḍā near Īḍar in Rāyadeśa.¹¹⁷

Mādhava

Mādhava, son of Harirāma and grandson of Gopajita of Vaṭapaṭṭana,¹¹⁸ a Śrīgauda brāhmaṇa from Gujarāt, composed his short *Yogasamuccaya* in the seventeenth century.¹¹⁹

Mahimasamudra

Mahimasamudra, called Jinasamudra before his *dīkṣā*, wrote, in Rājasthānī verse (*caupāī*), the *Vaidyakacintāmaṇi*, also called *Vaidyakaśāroddhāra* and *Samudra(prakāśa)siddhānta*. This work deals with *nidāna* and *cikitsā*.

Sources mentioned are Ātreya, Caraka, Śārīgadhara, Suśruta, Vāgbhaṭa, and *Yogaśataka*.

Mahimasamudra was a Śvetāmbara Jain monk who succeeded Jinacandrasūri as an ācārya. He also wrote a commentary on Bhartṛhari's *Vairāgyaśataka* and a play, called *Tattvaprabodhanāṭaka*. He lived in the second half of the seventeenth century.¹²⁰

Mānakavi

Mānakavi, also called Kavimāna and Mānamuni, was the author of the *Kavipramoda* and *Kavivinoda*,¹²¹ two medical treatises written in Rājasthānī. A *Vaidyakaśārasaṃgraha* by the same author is also recorded.¹²²

The *Kavipramoda*¹²³ is a large work in 2,944 verses (caupāī, dohā), arranged in nine chapters (uddeśa).

Authorities referred to are Ātreya, Bheḍa, Caraka, Kharanāda, Suśruta, and Vāgbhaṭa.

The *Kavivinoda*, also written in verse (caupāī, dohā, etc.), is divided into two parts (khaṇḍa). The first part deals with recipes of various types (kaṣāya, cūrṇa, guṭī, etc.), the second part with fevers and their treatment.¹²⁴

Mānakavi¹²⁵ was a pupil of Sumatisumerugaṇi, pupil of Bhaṭṭāraka Jinacandrasūri of the Kharataragaccha.¹²⁶ Another teacher of Mānakavi was Vinayamerugaṇi,¹²⁷ brother of Sumatisumeru.

Mānakavi lived in Bīkāner.

The *Kavivinoda* was completed in A.D. 1688, the *Kavipramoda* in A.D. 1689.

Maṇirāmamiśra

Maṇirāmamiśra, son of Vasanta, was the author of the *Vṛttaratnāvalī*, a short medical treatise written in 1641 or 1642,¹²⁸ and the *Guṇaratnamālā*, written in 1642.¹²⁹ A commentary, called *Vṛttaratnāvalīcandrikā*, on the former work was written by Kālikā- or Kālīprasāda.¹³⁰

Mevārāmamiśra

Mevārāmamiśra was the author of the *Vaidyakaustubha*,¹³¹ a medical citrakāvya,¹³² written in ingenious verses¹³³ in various, usually long metres, which are addressed to a beloved woman who is celebrated in high-flown language.¹³⁴

Contents

The *Vaidyakaustubha*¹³⁵ consists of about 1,200 verses arranged in sixteen chapters (sarga), which chiefly deal with therapy and to a lesser extent with nidāna. General subjects are absent, apart from vamaṇa and virecana. Three chapters are devoted to alchemical procedures and formulae of rasas.

The order of the diseases is largely in agreement with the *Mādhavanidāna*. Their order diverges with respect to the position of udara, pariṇāmaśūla, amlapitta and vātarakta; a number of diseases has been omitted altogether, e.g., svarabheda, arocaka, pānātyaya, udāvarta, gulma, ślīpada, upadaṃśa, and śūkaroga.¹³⁶ In a considerable number of cases the etiology of a disease, its symptoms, or both, are not described and prescriptions are given only. In some rare cases the nidāna verses are borrowed

from the *Mādhavanidāna*.¹³⁷ A conspicuous feature is the enumeration of the number of complications (upadrava).¹³⁸

Chapters one to eleven are devoted to the diseases and their treatment along āyurvedic lines. Chapter twelve deals with vamaṇa and virecana, chapter thirteen with the purification, etc., of the dhātus and upadhātus, chapter fourteen with the same type of procedures applied to mercury. Chapter fifteen, by far the longest, contains formulae of rasas against many diseases which are arranged again along the lines of the *Mādhavanidāna*. Chapter sixteen deals with vājīkaraṇa and rasāyana.

Sources referred to by Mevārāma are Caraka (1.1), the *Vṛddhatrayī* (16.88), and a work on karmavipāka (14.72).

Special features

Noteworthy among the diseases mentioned are mūtrarakta (7.4), phiraṅga (7.95–102), somaroga (9.10), mūtrāsītāra (9.12), and seven types of śītālā (br̥hatī, kodravā, paṇisahā, sarṣapikā, rājikā, lohitaṇḍalā, carmajā; 10.43–48).¹³⁹ Interesting substances from Mevārāma's materia medica are ākārakarabha (7.95 and 99), dvīpāntaravacā (7.102), rasakarpūra (14.35; 16.9), and a list of divyauśadhis (14.13–22).

The divyauśadhis enumerated are: abhayā, ahidamanī, ahivilocanikā, ajagandha, ākhukarṇī, akṣī, ambaravallārī, āṅkola, aparākhyā, ārdra, aruṇikā, asitahema, āsmanta, badarikā, bāhlika, bahuputa, bākucī, balā, bali, bhekā, bhekaparṇī, bhujaṅgamalatā, bimbi, brāhmī, br̥hatī, cakramarda, caṇḍālinī, cāṅgerikā, chilihīṇḍa, daṇḍī, devadālī, dhenusurasā (v.l. dhenurasanā), dhūmasāra, gajakarṇikā, gavākṣī, ghana, ghanarava, girīkarṇikā, guṇjā, halinī, haṃsāṅghri, harinakhī, hastiśuṇḍī, hemavallī, hutabhugdamanī, hutāśa, jāti, jatu, jhaṣā, jīvantikā, jvalanagarbha, kākajāṅghā, kākavadanā, kālī, kamalacārīṇikā, kaṇā, kāñcanikā, kaṇgunikā, kañcukī, kapi, karavīra, kāravellī, karkoṭikā, karpāsa, kāśmarī, khaṭī, kokilākṣa, kośātaktī, kṛṣṇatulasī, kṣapāpatilatā, kṣāra, kṣava, kṣīrakanda, kṣīrāṅghripa, kukkurī, kumārī, kuntī, lajjāvatī, lavalī, madhu, mayūrakasīkhā, mṛgatṛṇa, muṇḍī, murā, mūrvā, musalī, nāgārjunī, navasādara, nīlāhvayā, nimbarājī, nimbuka, palāśa, paṇīdvaya, paṭu (mentioned twice), pīluka, pīyūṣavajra(?), puṅkhā, puṣkaramūla, rajanī, rambhā, rasonaka, rāṣṭrī, ravi, ravivar-tikā, rudantī, ruvūka, śākāṅghripa, śārikhapuṣpī, sarṣapa, śatapadī, sehuṇḍa, śigru, śikhi(n), sinduka, sitavibhākara, śṛkka, śṛṅga, śṛṅgī, sūraṇa, suvarṇakusuma, taurī, tejovatī, tilaparṇī, toyakalaśī, trikaṇṭaka, tripattrī, tumbī, ūrṇā, vajrakanda, vaṭāṅghrī, vidārī, vijayā, vipina, viṣa, viṣamuṣṭika, viṣṇukrāntā, viśvā, vṛṣa, yakṣanayanā, and yavanamūlaka.¹⁴⁰

The author

Mevārāmamiśra mentions his name at the end of the *Vaidyakaustubha* (16.87), adding that he lived in Śūkarakṣetra.¹⁴¹

Date

Since it is very probable that Mevārāma was acquainted with the medical citrakāvyas of Lolimbarāja,¹⁴² he can be assigned to the second half of the seventeenth century.

Mitramiśra

Mitramiśra, son of Paraśurāinapaṇḍita and grandson of Haṃsapaṇḍita,¹⁴³ wrote under the auspices of Virasiṃha, son of Madhukarasāha, grandson of Pratāparudra,¹⁴⁴ the *Vīramitrodaya*,¹⁴⁵ a very large work on dharmasāstra, composed between 1610 and 1640. Parts of the *Lakṣaṇaprakāśa* of this encyclopaedia deal with subjects of medical interest such as the parts of the human body¹⁴⁶ and the qualities of a physician.¹⁴⁷ The chapters on gaja- and aśvalakṣaṇa of the same section are about elephants, respectively horses.¹⁴⁸

Nāgeśabhaṭṭa

Nāgeśabhaṭṭa wrote, in the seventeenth or eighteenth century, the *Mañjūśāśekhara*.¹⁴⁹

Praharāja or Yogipraharāja

Praharāja or Yogipraharāja was the author of the *Vaidyālaṃkāra* and the *Vaidyahr̥dayānanda*.¹⁵⁰

The *Vaidyahr̥dayānanda*¹⁵¹ is a work of 268 verses in diverse metres, arranged in five chapters (prakāśa). It is written in the form of a dialogue between husband and wife, the latter being addressed in a flowery style reminiscent of the works of Loliṃbarāja and Hastiruci.

Contents

Chapter one (eighty-one verses) begins with a maṅgala in praise of Kṛṣṇa, and deals, after an introduction and some verses on general subjects, with the treatment of fevers (14–81). Chapters two to four are about the treatment of other diseases. Chapter five describes a number of rasayogas against various disorders and for vājīkaraṇa purposes.

The order of the diseases disagrees with the scheme of the *Mādhavanidāna*. Chapter two is concerned with atisāra, grahaṇī, arśas, agnimāndya, gulma-plīhan, udara, kṛmi, śūla, hṛdroga, udāvarta, vṛddhi, vidradhi, and ślīpada. The subjects of chapter three are kāsa, śvāsa, hikkā, svarabheda, raktapitta, kṣaya, pāṇḍuroga, śoṭha, vātaroga, vātarakta, ūrustambha, āmavāta, prameha, somaroga, sthaulya-kārsya, mūtrakṛcchra, mūtrāghāta, and āsmarī. Chapter four describes the treatment of arocaka, chardi, tṛṣṇā, mūrchā, madātyaya, dāha, amlapitta, unmāda, apasmāra, kuṣṭha, śītapitta, visphoṭa, masūrī, vraṇa, viṣa, bhagandara, upadaṃśa, galagaṇḍa, pādaroga, nakharoga, oṣṭharoga, kṣudraroga, nāsāroga, mukharoga, karṇaroga, netraroga, śīroroga, pradara, puṣparodha, garbhiṇīroga, garbhacalana, mūḍhagarbha, sūtikāroga, and bālaroga.

The materia medica presents no noteworthy features.

Paying homage to Kṛṣṇa is recommended a number of times (2.16 and 30; 3.17) as a therapeutic measure.

The only authority referred to is Caraka (2.4).

Special features

The chapter on fevers mentions a *dāhajvara* separately (1.24–27).¹⁵² Chapter two contains recipes against *śothātisāra* (2.12) and *chardiyatisāra* (2.13). The only type of *mūtrāṅghāta* referred to in chapter three is *uṣṇavāta* (3.43). Chapter four mentions a small number of *kṣudrarogas* (4.35–36); it contains a formula against *amenorrhoea* (*puṣparodha*).

Some diseases are absent: *visarpa*, *śūkadoṣa*, *yonivyāpad*, and *yonikanda*; *varidhma*, *śītalā*, and *phiraṅga* are neither referred to.

The *Vaidyahrdayānanda* mentions a nose-ornament (*nāsābhūṣaṃaṇi*); P.K. Gode regarded it as the nose-stud, which, in his opinion, is a typical ornament of South Indian ladies, as contrasted with the elaborate nath of the ladies of *Mahārāṣṭra*; he concluded that the author hailed from South India.¹⁵³ D.C. Sircar objected to this view, asserting that nose-studs are popular among all classes of women in Eastern India.¹⁵⁴

The author

Yogipraharāja¹⁵⁵ was a son of *Nīlakaṇṭha* of *Vatsa* gotra, also called *Jamadagnideva*, who was an astrologer (*jyautiṣa*) and the preceptor of the chief queen of king *Vikrama* of *Nandapura*.¹⁵⁶ He was an expert in many sciences.¹⁵⁷

Date

P.K. Gode suggested that the *Vaidyahrdayānanda* has been written after A.D. 1550; his argument was that the expression *anaṅgaraṅgapravīṇa* (one proficient in *anaṅgarāṅga*) refers to *Kalyāṇamalla*'s *Anaṅgarāṅga*, a work on the science of love, assigned by some to the closing decades of the fifteenth century. D.C. Sircar objected that Gode's interpretation is open to doubt because the expression mentioned may simply mean 'someone proficient in the art of love'; moreover, the date of *Kalyāṇamalla* is disputed.

King *Vikrama* of *Nandapura* has been identified by D.C. Sircar¹⁵⁸ as *Vikrama I* of *Jayapura*¹⁵⁹ in *Orissa*,¹⁶⁰ who ruled in the third quarter of the seventeenth century. *Yogipraharāja* can therefore be assigned to the second half of that century.¹⁶¹

Raghunātha

Raghunātha was the author of the *Bhojanakutūhala*,¹⁶² a large work in verse, interspersed with glosses and explanatory prose passages, on dietetics and related subjects. It consists of three sections (*pariccheda*), the first of which has been edited.¹⁶³

Contents

Section one, called *dravyaguṇāguṇākathana*, deals with grain and pulse (2–25), prepared dishes (*siddhāṇṇa*; 25–58), vegetables, fruits, and condiments (58–121), sugar (122), refreshing drinks (*pānaka*; 122–123), *kāñjika* (123–124), milk and other dairy products (125–151), oils (151–155), products of the sugarcane (155–165), honey (165–167), alcoholic beverages (168–169), meat and fish (169–176), water (176–195), poisoned food (196–197), articles of food that should not be taken together (*viruddhadravya*; 197–199), healthy and harmful foods (*pathyāpathya*; 199–212),

articles of food that should not be mixed together (*saṃyogaviruddha*; 212–214), vessels for food (214–215), and miscellaneous subjects (*bhojanavidhi*, *tāmbūlavidhi*, ointments for the body, clothing; 215–230). The vernacular names of plants, dishes, etc., are added to the Sanskrit text,¹⁶⁴ many countries are mentioned in the glosses,¹⁶⁵ as well as the names of many rivers in the body of the text (180–183).¹⁶⁶

Sources referred to in section one are: *Abhidhāna* (22; 27; 68; 74), *Bhāvaprakāśa* (2; 8; 58), *Bhoja* (55; 145), *Caraka* (62), *Dhanvantarinighaṇṭu* (76),¹⁶⁷ *Haimana* (30; 51; 162),¹⁶⁸ *Hṛdayadīpa* (29; 52; 57), *Janārdanamahodaya* (58),¹⁶⁹ *Keyadeva* (58; 161; 162), *Kriyāsāra* (28),¹⁷⁰ *Nighaṇṭu* (many times),¹⁷¹ *Nighaṇṭurāja* (1), *Pārijāta* (14; 16; 31),¹⁷² *Prayogapārijāta* (7; 74),¹⁷³ *Rājanighaṇṭu* (3; 4; 5; 7; 155),¹⁷⁴ *Suṣeṇa* (7; 21; 32; 44; 142; 143; 146; 156; 175; 228), *Suśruta* (55; 163), *Vāgbhaṭa* (many times), *Viṣṇupurāṇa* (226), and *Vṛddhasuśruta* (186).

Section two treats of ritually unclean articles of food, the Vaiśvadeva offering, and the feeding of guests. Section three, called *vibhāvarīvilāsa*, is concerned with furniture and similar accessories, the physical and spiritual effects produced by different items of that description, and with a number of miscellaneous subjects.¹⁷⁵

Section two quotes many works on *dharmaśāstra*, a number of *purāṇas*, and various other treatises; some of the authorities quoted are: *Āṅgiras*,¹⁷⁶ *Aparārka*,¹⁷⁷ *Āpastamba*,¹⁷⁸ *Āśvalāyana*, *Aśvamedhika*,¹⁷⁹ *Baudhāyana*,¹⁸⁰ *Bhāvaprakāśa*, *Bhaviṣya*, *Bhaviṣyapurāṇa*, *Bṛghu*, *Brāhma*, *Brahmapurāṇa*, *Bṛhadyama*,¹⁸¹ *Bṛhaspati*,¹⁸² *Candrikā*, *Caturvīṃśatimata*,¹⁸³ *Devala*,¹⁸⁴ *Dharmasāra*,¹⁸⁵ *Dharmasārasudhānidhi*,¹⁸⁶ *Gārgya*,¹⁸⁷ *Gautama*,¹⁸⁸ *Gobhila*, *Hārīta*,¹⁸⁹ *Hemādri*, *Kaśyapa*,¹⁹⁰ *Kātyāyana*,¹⁹¹ *Kūrmapurāṇa*, *Madanaratna*,¹⁹² *Mādhava*, *Mādhavīya Vyāsa*,¹⁹³ *Manu*, *Mārkaṇḍeyapurāṇa*, *Mitākṣarā*, *Paithīnāsi*,¹⁹⁴ *Pārāśara*,¹⁹⁵ *Pārijāta*,¹⁹⁶ *Pracetas*,¹⁹⁷ *Prayogapārijāta*, *Pulastya*,¹⁹⁸ *Rṣyaśṛṅga*,¹⁹⁹ *Samgraha*,²⁰⁰ *Samvarta*,²⁰¹ *Śārikhalikṛta*,²⁰² *Śātātapa*,²⁰³ *Ṣaṭtriṃśamata*,²⁰⁴ *Śaunaka*, *Skānda*, *Smṛtiratnāvalī*,²⁰⁵ *Smṛtisamgraha*,²⁰⁶ *Smṛtyarthasāra*,²⁰⁷ *Śūlapāṇi*,²⁰⁸ *Suśruta*, *Taittirīyakaśruti*, *Uśanas*,²⁰⁹ *Vasiṣṭha*,²¹⁰ *Vijñāneśvara*, *Viṣṇu*, *Viṣṇupurāṇa*, *Vṛddhātreyā*, *Vṛddhayājñavalkya*, *Vyāsa*,²¹¹ *Yājñavalkya*,²¹² *Yama*,²¹³ and *Yogīśvara*.

Section three quotes *Āśvalāyana*, *Baudhāyana*, *Bṛghu*, *Brahmapurāṇa*, *Bṛhaspati*, *Candrikā*, *Caraka*, *Devala*, *Devarāta*,²¹⁴ *Dharmasāra*,²¹⁵ *Gāruḍa*, *Gautama*, *Hariścandra*, *Harivaṃśa*, *Kārikābhāṣya*, *Kāśikāṇḍa*, *Kāśyapa*, (*Vaidya*) *Kātyāyana*, *Mādhavīya*,²¹⁶ *Manu*, *Mārkaṇḍeya*, *Mārkaṇḍeyapurāṇa*, *Nārada*,²¹⁷ *Nārāyaṇa-dāsanibandha*,²¹⁸ *Nṛsiṃha*, *Pañcasāyaka*, *Pārāśara*, *Paraśurāmapratāpa*, *Pārijāta*, *Pracetas*, *Prayogapārijāta*, *Ratirahasya*, *Ratnamālā*, *Sahyādrīkhaṇḍa*,²¹⁹ *Samgraha*, *Sāmudratilaka*,²²⁰ *Śaṅkha*, *Śaṅkhalikṛta*, *Śātātapa*, *Śaunaka*, *Śivarahasya*,²²¹ *Skaṇḍha*, *Smṛtiratnāvalī*, *Śrīpati*,²²² *Strīlakṣaṇa*, *Suśruta*, *Svapnādhyāya*,²²³ *Vāgbhaṭa*, *Vasiṣṭha*, *Vijñāneśvariya*, *Viṣṇu*, *Vṛddhapārāśara*, *Vyāsa*, *Yājñavalkya*, *Yama*, and *Yogayājñavalkya*.²²⁴

The *Bhojanakutūhala* is quoted in *Dattarāma's Caryācandrodaya* and the *Bṛhannighaṇṭuratnākara*. A *Kutūhala* is quoted in *Ananta's Pratāpakalpadruma*.

Special features

Four kinds of *yāvanāla* are described (9); four kinds of *kaṇṇu* (19); *cīnāka* is differ-

ent from kaṅgu (19); numerous prepared dishes (siddhāṇṇa) are described (25–58); ten types of vegetables (58)²²⁵ instead of the more usual six; a śvetasūraṇaka (61); several types of ālu: mukhālu, piṇḍālu, raktapiṇḍālu, kāsālu, phoḍālu, pānīyālu, nīlālu (62); three kinds of cillī (66); two types of jharasī (68); a dvīpāntaracakramarda (72); two types of golomikā (73); two types of agastya (74) instead of the six of the *Rājanighaṇṭu*; three types of kośātakī: kośātakī, rājakośātakī, śīrakośātakī (80–81); three types of vṛntāka: vṛntāka, nīlavṛntāka,²²⁶ śvetavṛntāka (87); phāṇpaṭa (99);²²⁷ sītāphala (103);²²⁸ vātakumbha (105);²²⁹ kāsārākhyaphala (114);²³⁰ substances that can or cannot be mixed with milk (134–135); substances which can alleviate particular types of ajīrṇa (203–211).

The author

Raghunātha²³¹ was the son of Gaṇeśabhaṭṭa, grandson of Raghunātha, and great-grandson of Hariharabhaṭṭa. Raghunātha belonged to the Vasiṣṭha gotra and to the Karhāḍe brāhmaṇas²³² among the Mahrāṭṭas. His family surname was Navahasta and his family deity Viṣṇu. His guru was Anantadeva, son of Āpadeva, grandson of Anantadeva. Anantadeva, who lived between 1625 and 1675, was a descendant of the Mahrāṭṭa saint Ekanātha.²³³ He was a versatile scholar and prolific writer.²³⁴ Anantadeva's father, Āpadeva, was the author of the *Mīmāṃsānyāyaprakāśa*.²³⁵

Raghunātha was intimately associated with the Mahrāṭṭa saint Rāmadāsa (A.D. 1608–1681),²³⁶ the preceptor of Śivājī.²³⁷ He was for a long time (about 1648–1683) in charge of the temple of Raghupati, the headquarters of Rāmadāsa at Chaphal in the Sātārā district, lying on the Man, a tributary of the river Kṛṣṇā. After Śivājī's death (1680) he seems to have settled in Tanjore, where a Mahrāṭṭa kingdom had been established about 1678 by Ekojī Bhosala,²³⁸ the step-brother of Śivājī. Raghunātha speaks of Dīpāmbikā, also called Dīpābāī, Ekojī's queen, as his patroness.

Apart from the *Bhojanakutūhala*, Raghunātha wrote the following works in Sanskrit: *Cāturmāsya prayoga*,²³⁹ *Dharmāmṛtamahodadhī*,²⁴⁰ *Janārdanamahodaya*,²⁴¹ *Kāśīmīmāṃsā*,²⁴² *Prāyaścittakutūhala*,²⁴³ *Prayogaratnabhūṣā*,²⁴⁴ and *Sāhityakutūhala*. In Marāṭhī he wrote: *Govardhanoddhāraṇa*, *Narakavarṇana*, and *Strīdharmā*.²⁴⁵

Date

The literary activity of Raghunātha may be assigned to the period 1675–1712. A MS of the *Prayogaratnabhūṣā* was completed in 1678 and a MS of the *Bhojanakutūhala* dates from about 1681/82. The *Dharmāmṛtamahodadhī* was completed in 1701 and the *Narakavarṇana* between 1701 and 1712.²⁴⁶

Raghunātha Paṇḍita

Raghunātha Paṇḍita was the author of (1) *Cikitsāmañjarī*, (2) *Nāṭījñānavidhi*,²⁴⁷ and (3) *Vaidyavilāsa*.

(1) The *Cikitsāmañjarī*²⁴⁸ is a therapeutic treatise in 428 skillful verses,²⁴⁹ arranged in seven chapters (kusuma). The order of the diseases agrees in large measure with the

Mādhavanidāna. The author added verses on emetics (6.93–95) and purgatives (6.96–601), aphrodisiacs (vājīkaraṇa and kāmoddīpana; 6.102–108), rasāyana (7.1–70), and anupāna (7.71–73). The materia medica is of an āyurvedic type, except for the thirty-two rasayogas described in the section on rasāyana of chapter seven.

Authorities referred to are Ātreya (1.2),²⁵⁰ Caraka (7.1),²⁵¹ Suśruta (1.2), and Vāgbhaṭa (1.2). Raghunātha's *Cikitsāmañjarī* shows clearly traces of the influence of Lolimbarāja's *Vaidyājīvana*.²⁵² The author frequently refers to himself,²⁵³ often in a self-eulogistic way.²⁵⁴

Some diseases or groups of diseases are not separately dealt with: svarabheda, mūrchā, pānātyaya, dāha, unmāda, apasmāra, vātavyādhi, bhagna, nāḍīvrāṇa, upadaṃśa, śūikadoṣa, masūrikā, and kṣudraroga. A children's disease added is phullikā (6.84) or utphullikā (6.80). The substantive vāris used in the sense of vāri (water).²⁵⁵ Some noteworthy drugs prescribed are akalla (6.18), hirākaśī (6.31),²⁵⁶ kabāba (6.4), kokamba (6.41),²⁵⁷ mārkaṇḍī (1.62; 6.96),²⁵⁸ māyāphala (6.31), śīrṣataila²⁵⁹ (5.38, 39, 48, 49), and vāiḍaṅga (3.4).²⁶⁰

Two rasas (śvāsakuṭhāra, 7.30–32; vaṅgeśvara, 7.37–39) are said to have been used by the author himself.

(3) The *Vaidyavilāsa*²⁶² is a therapeutic treatise in verses²⁶³ of various metres,²⁶⁴ arranged in ten chapters (taraṅga). The first seven chapters repeat almost verbatim the contents of the *Cikitsāmañjarī*, with numerous additions, a few omissions, and occasionally a different order. Chapter eight deals with the purification (śodhana) and killing (māraṇa) of the metals and with other subjects belonging to rasasāstra. Zinc (yaśada) is absent among the metals and replaced by ārakūṭa (a kind of brass). A disease, called strīprameha, probably identical with somaroga, is mentioned. Chapter nine describes the thirty-two rasas of chapter seven of the *Cikitsāmañjarī*, plus seventeen additional ones. Chapter ten is concerned with the examination of the pulse and of the urine, as well as with the messenger sent to the physician, the characteristics of a good physician, the examination of the patient, and, finally, weights and measures. The eulogistic epithets conferred on the author himself, which are frequent in the *Cikitsāmañjarī*, are absent from the *Vaidyavilāsa*.²⁶⁵ The contents of the *Vaidyavilāsa* prove that it is an expanded and improved version of the *Cikitsāmañjarī*.²⁶⁶

The *Vaidyavilāsa* is quoted in Jñārasarāmaśarman's *Anupānadarpaṇa*, the *Pākamārtāṇḍa*, *Rasāyanasaṅgraha*, *Rasayogasāgara*, and *Yogaratanākara*.

The author and his date

Apart from the three medical works, Raghunātha Paṇḍita wrote a work on poetics, the *Kavikaustubha*,²⁶⁷ and two treatises on metrics, the *Chandoratnāvalī*²⁶⁸ and *Vṛttasiddhāntamañjarī*.²⁶⁹ He also composed four poems in Marāṭhī, the *Ḍamayantī-svayaṃvara*,²⁷⁰ *Gajendramokṣa*,²⁷¹ and *Rāmadāsavarṇana*,²⁷² as well as a metrical Marāṭhī version of Jagannāthapaṇḍita's *Gaṅgālaharī*.²⁷³

Raghunātha,²⁷⁴ who hailed from a family surnamed Manohara,²⁷⁵ was the son of Bhikāṇbhaṭṭa and grandson of Kṛṣṇapaṇḍita.²⁷⁶ His place of residence was Campā²⁷⁷

or Campāvātī.²⁷⁸ The author adds the following geographical details on the location of this town: “There is a fort (sthāna) named Kollāgiri; on its east lies the town Campāvātī, next to it is the family goddess Mahālakṣmī”.²⁷⁹ Campā(vatī) has been identified as Caul in the Alibag Talook of the Kolaba district of Mahārāṣṭra,²⁸⁰ which is situated about a mile or two east of the famous fortress of Koralai (Kollāgiri) and has on its eastern border a hillock with a temple dedicated to Mahālakṣmī. Some branches of the Manohara family still live at Caul and worship Mahālakṣmī as their family goddess.²⁸¹

The identity of Raghunātha Paṇḍita with one of several persons called thus has long been a vexed problem and several theories have been developed, which are elaborately discussed by S.L. Katre.²⁸² Raghunātha's life history has been sketched by the latter. He was born about 1640 and spent his early years in Caul. Probably he went to Benares in order to complete his studies. After returning to Caul for some time, he left that city to seek his fortune elsewhere. He may have met Śivājī in the course of his wanderings and settled finally at the court of Ekojī (1676–1683) in Tanjore about 1675. In Tanjore he came in close contact with distinguished visitors, like saint Rāmadāsa and the Marāṭhī poet Ānandatanaya.²⁸³ Most of his works, with the exception of the *Gaṅgālaharī-ṭīkā*, probably composed during his stay at Benares, date from the period 1675–1711. The three medical treatises are from the year 1697²⁸⁴ and belong therefore to the period of Ekojī's successor, Śāhajī II (1683–1711). Raghunātha probably died at Tanjore about 1720 or somewhat later.

Rājīvalocana Dhanvantari

Rājīvalocana Dhanvantari, son of mahopādhyāya Vaidyakanthābharāṇa and Śrīmatī, was the author of the *Siddhayogārṇava*²⁸⁵ and a *Ratnāvalī*.²⁸⁶

The *Siddhayogārṇava* is a work on therapy in ten chapters (upadeśa).²⁸⁷ The treatise begins with the descent (avatāra) of āyurveda to earth, according to the story told in the *Carakasamhitā*. The titles of the ten chapters are: cikitsāṅga, nānā-vidhajvaracikitsita, jvarātīsārādicikitsita, krimyādicikitsita, vātavyādhyaḍicikitsita, amlapittādinivāraṇa, pradarādinivāraṇa, rasāyanādivijñāna, snehaprakriyādivijñāna, and rasādisuddhyaḍivijñāna.²⁸⁸

Rāma Bhaṭṭa Hosiṅga

Rāma Bhaṭṭa Hosiṅga, son of Bhavānī and Viśvanātha, wrote at the instance of king Anūpasimpha of Bīkāner (1674–1709)²⁸⁹ the *Amṛtamañjarī*, a work on toxicology in 350 granthas. A *Cikitsāmālātī* in 4,000 granthas, composed by a paṇḍit of Paraśurāmakula at the request of Rāma Bhaṭṭa Hosiṅga, is mentioned by the latter as one of his own works in his *Dānaratnākara*, which also refers to the *Amṛtamañjarī*.²⁹⁰

Rāmacandra Paṇḍita

Rāmacandra Paṇḍita²⁹¹ was the author of the *Rāmavinoda*²⁹² and *Vaidyavinoda*. He also wrote some kāvyas and a *Sānudrikabhāṣā*. All these works were composed in Rā-

jasthānī.²⁹³

The *Rāmavinoda*²⁹⁴ consists of 1,981 verses (caupāī, dohā, sorāṭha), arranged in seven chapters (samuddeśa). Some of the subjects dealt with are:²⁹⁵ puruṣalakṣaṇa, śārīra, sādhyāsādhyaalakṣaṇa, mūtraparīkṣā, pittakaphavāyuhetu, the nidāna and treatment of several diseases.

Fever is classified into ten types: ajīrṇa-, āhāra-, pitta-, kheda-, vāyu-, dṛṣṭi-, kāla-, rakta-, kapha-, and ekāhikajvara (together with anyedyuṣka-, ṭṭīyaka-, and caturthakajvara); hāridraka- and saṃtatajvara are also mentioned.

The *Rāmavinoda* ends with two additions to the text: a *Nāḍīparīkṣā* (45 verses) and *Mānapramāṇa* (13 verses).

Sources referred to are: Ātreya, *Carakasamhitā*, *Mādhavanidāna*, *Rājamārtaṇḍa*, *Rasacintāmaṇi*, *Rasaratnākara*, *Śārngadhara*, *Suśrutasaṃhitā*, *Vāgbhaṭa*, *Vṛnda*, *Yoga-cintāmaṇi*, and *Yogaśataka*.²⁹⁶

The *Vaidyavinoda*²⁹⁷ is an adaptation in Hindī verse (caupāī, dohā) of the *Śārngadharaśaṃhitā*. It consists of 2,525 verses, arranged in three sections (khaṇḍa) with respectively seven, thirteen, and thirteen chapters (adhyāya).

The author and his date

Rāmacandra, a Jain monk of the Kharataragaccha, was a son of Keśavadāsa²⁹⁸ and a pupil of Padmarāṅgagaṇi.²⁹⁹ Padmarāṅgagaṇi's guru was Padmakīrti; the latter's guru was Jinasiṃhasūri.³⁰⁰

The *Rāmavinoda* was completed in Sakkīnagara in 1663/64;³⁰¹ the *Vaidyavinoda* dates from 1669.³⁰² Rāmacandra lived during the reign of Aurangzīb.³⁰³

Rāmamāṇikyasena

Rāmamāṇikyasena wrote his *Prayogacintāmaṇi* in the seventeenth century.³⁰⁴

Śaṃkara

Śaṃkara was the author of (1) *Vaidyavinoda*,³⁰⁵ (2) *Rasaśaṃkara*, and (3) *Śaṃkarā-khya*.

(1) The *Vaidyavinoda*³⁰⁶ is a saṃhitā³⁰⁷ dealing chiefly with nidāna and cikitsā, along with some general subjects. Its therapy is of a mixed type; rasas have a secondary place in it.

Contents

The work consists of 1,750 verses,³⁰⁸ arranged in sixteen chapters (ullāsa).³⁰⁹ After some introductory verses (1–8), definitions of nidāna, prāgrūpa, rūpa, etc. (11–13), a short exposition on nāḍī- (13–21) and mūtraparīkṣā (22–25), and a list of ariṣṭas (26–33), the main part of the treatise begins, which describes the nidāna and cikitsā of the diseases (chapters one to fifteen), arranged in basic agreement with the *Mādhavanidāna*, but with a number of additions: bhasmaka (3.16–17), vardhma (6.77 and 10.79–80),

dehadaurgandhya (10.10–13), vahnidagdha (11.106–119), munnatākhyaroga (12.79–82), sūryasaṃkrāntivishphoṭa (13.129–132), snāyuroga (13.133–139), and śītalā (13.140–158). Only a restricted number of the kṣudrarogas described by Mādhava is dealt with by Śaṅkara; the same applies to the eye diseases. The diseases called somaroga and phiraṅgaroga are absent. Much of the nidāna material seems to consist of free renderings of verses forming part of the *Mādhavanidāna* and borrowings from it, but other sources were evidently also utilized. Chapter sixteen is concerned with various general subjects: disorders by the drinking of polluted water (1–2), vājīkaraṇa (4–16), jalayoga (17–21),³¹⁰ vamaṇa and virecana (22–43), technical terms (44–54), medicinal preparations (55–128), weights and measures (129–138), technical terms again (167–177), etc.

Śaṅkara's materia medica contains for the greater part common names of āyurvedic drugs, but rare or new names are also met with. The use of mercury,³¹¹ sulphur, etc., is not inconsiderable, whereas the number of rasas is quite limited.³¹² Alchemical yantras are mentioned sporadically.³¹³ Religious elements are infrequently encountered: Ghaṭotkaca³¹⁴ should be worshipped by patients suffering from śītalā (13.148, 150, 157), as well as Śiva and Gaurī (13.157). Two mantras are found in this work, one with the object of acquiring a son (15.184), the other, quoted from the *Viṣṇupurāṇa*, against snake-bites (15.271).

Sources referred to by Śaṅkara are Hārīta, Pārāśara and Suśruta.³¹⁵

A commentary on the *Vaidyavinoda* was written by Rāmanātha.³¹⁶

A *Vaidyavinoda* is quoted in Ananta's *Pratāpakalpadruma*, Vācaka Dīpacandra's *Laighanapathyanirṇaya*, and Nidhi's *Yogasamuccaya*.

A *Vaidyavinoda* was one of the sources of Kalyāṇa's *Bālatantra* according to Dīpacandra.³¹⁷

Special features

Noteworthy in the field of nosology are the following features. The swelling at the root of the ear, usually said to arise at the end of a saṃnipāta fever,³¹⁸ may be found in the initial, middle, and last phase of a fever according to the *Vaidyavinoda* (1.67). The verses on śoṭha mention swelling (śoṭha) arising from śīgru (10.56) and bhallātaka (10.58). A new disorder, not mentioned in other sources, is munnatākhyaroga (12.79–82); it is described as a venereal disease characterized by induration and swelling of the prepuce (līṅgacarman), which is caused by sexual intercourse with an affected female. Another infectious disease is kuṣṭha (13.15); the lepromatous type, in which the tip of the nose may become deformed (nāsikāgrimavibhāgavibhaṅga) or parts of the fingers lost (aṅgulīvigalana), is called galatkuṣṭha (13.56). Uarda and śītapitta are regarded as synonyms (13.67).³¹⁹ A special form of viṣphoṭa is sūryasaṃkrāntivishphoṭa (13.129–132),³²⁰ in which the recitation of the śītalāmantra is recommended, along with other remedial measures. Śītalā, also called oṣa, is said to be of four types: takrā, orikā, ākasmikā, and śītalā (13.140–158). The term masūrīkā seems to be employed as a synonym of oṣa (13.154).³²¹ Diseases of the nail bed are viṣa (14.33) and pūṭinakha (14.37) or nakhakoṭipūṭibhāva (14.35). In the section on diseases of the ears, an instrument is described that can be used in extracting foreign matter from the ear (the pannagi-

yantra, shaped like the hood of a serpent: 15.19–20).

Remarkable names of medicinal plants are *bhuṇḍikā* (3.27), *candraśūrā* (15.114), *godhāvinī* (9.18), *kārika* (7.30), *ketu* (7.30), *photā* (11.99), *trika* (8.19),³²² and *uṣṭrakāṇṭha*³²³ (6.109).

Other interesting terms are *dhundha*³²⁴ (15.109 and 118), *dhundhukāra*³²⁵ (15.116), *kabābā* (15.114), and *śipikā*³²⁶ (11.113; 12.81; 15.115).

(2) *Rasaśaṅkara*.³²⁷

(3) *Śaṅkarākhyā*.³²⁸

The author and his date

Śaṅkara was the son of (Bhaṭṭa) Ananta of Gauḍavaṁśa.³²⁹ He wrote the *Vaidyavinoda* at the request of his royal patron, king Rāmasiṃha, son of Jayasiṃha.³³⁰ This king was identified by S.L. Katre³³¹ as Rāmasiṃha of Amber (1668–1699), son of the Jayasiṃha (1621–1667) who led in 1665 Aurangzīb's successful expedition against Śivājī.³³² A MS of the *Vaidyavinoda* dating from 1705/06³³³ confirms that the work belongs to the last part of the seventeenth century.³³⁴

Śivadattamiśra

Śivadattamiśra was the author of (1) the *Śivakoṣa* and its commentary, the *Śivaprakāśa*,³³⁵ and (2) the *Samjñāsamuccaya*.³³⁶

(1) The *Śivakoṣa*³³⁷ is a homonymic dictionary,³³⁸ restricted to the āyurvedic materia medica, in 540 verses, arranged alphabetically according to final consonants; it is accompanied by an auto-commentary, called *Śivaprakāśa*.³³⁹

The method followed and the technical terms used are explained by the author in the introductory verses, which also refer to a series of lexica as sources: *Śabdārṇava*,³⁴⁰ *Ajaya*,³⁴¹ *Amara*,³⁴² *Vopālita*,³⁴³ *Siṃha*,³⁴⁴ *Medinī*,³⁴⁵ *Viśva*,³⁴⁶ *Hārāvalī*,³⁴⁷ *Halāyudha*,³⁴⁸ *Śaśvata*,³⁴⁹ *Haima*,³⁵⁰ and *Trikāṇḍaśeṣa*.³⁵¹ No sources are mentioned in the body of the text.³⁵²

The *Śivakoṣa* was one of the sources of Raghunāthajī's *Nighaṇṭusaṃgraha*.

The auto-commentary on the *Śivakoṣa*, called *Śivaprakāśa*,³⁵³ is a very valuable work which explains each word of the koṣa and quotes profusely from a large number of authorities. Repeatedly added are the local names of plants³⁵⁴ and the countries where they are found.³⁵⁵

Sources mentioned in the *Śivaprakāśa* are:³⁵⁶ *Abhidhānacūḍāmaṇi*,³⁵⁷ *Ajaya*,³⁵⁸ *Amara*,³⁵⁹ *Amaracandra*,³⁶⁰ *Amaramālā*,³⁶¹ *Anekārthāḥ*,³⁶² *Anekārthadhvanimāñjarī*,³⁶³ *Āścaryamañjarī*,³⁶⁴ *Aśokamallā*,³⁶⁵ *Aṣṭaigaṣaṃgraha*, *Ātreya*, *Bāṇabhaṭṭa*, *Bhāravi*, *Bhāvabhūti*, *Bhāvaguṇanāmaṃālā*,³⁶⁶ *Bhāvaguṇaratnamālā*,³⁶⁷ *Bhāvamiśra*, *Bopadeva*,³⁶⁸ *Cakra*,³⁶⁹ *Candra*,³⁷⁰ *Candranandana*,³⁷¹ *Dallaṇa*, *Damayantīkāvyā*,³⁷² *Daṇḍin*, *Devala*,³⁷³ *Dhanvantari*,³⁷⁴ *dhānvantarīyāḥ*,³⁷⁵ *Dharaṇi*,³⁷⁶ *Dharmadāsa*,³⁷⁷

Dharmīṣṭha,³⁷⁸ *Dvirūpa*koṣa,³⁷⁹ Gālava,³⁸⁰ gāndhikāh,³⁸¹ gosvāmigopeśvarāh,³⁸² *Guṇaratnamālā*,³⁸³ gurjarāh, Haima,³⁸⁴ Hāla(bhūbhuj), Halāyudha, *Hārāvalī*, Haṭṭa-candra,³⁸⁵ Hemacandra,³⁸⁶ Hemādri, *Hṛdayadīpaka*,³⁸⁷ Indu,³⁸⁸ Jejjhaṭa, Kālidāsa, *Kesaramālā*,³⁸⁹ Keśava³⁹⁰, Keyadeva,³⁹¹ *Kumāra*,³⁹² Locana,³⁹³ Lolimbarāja, Madanapāla, *Madanavinoda*, *Madguruvallabhā*,³⁹⁴ Mādhava,³⁹⁵ *Mādhavī*,³⁹⁶ Māgha, *Mālā*,³⁹⁷ *Medinī*, *Meghadūta*, *Mitākṣarā*, Mukuṭa,³⁹⁸ *Nāmaguṇamālā*,³⁹⁹ *Nāmamālā*,⁴⁰⁰ Nānyadeva,⁴⁰¹ Nārāyaṇabhaṭṭa,⁴⁰² *Nighaṇṭu*, Pāṅkajabhaṭṭa,⁴⁰³ pāścātyāh, *Prabhāvatīharāṇacampū*,⁴⁰⁴ prācyāh, Prāñca,⁴⁰⁵ Puruṣottama,⁴⁰⁶ Rabhasa,⁴⁰⁷ *Raghu*,⁴⁰⁸ *Rājanighaṇṭu*,⁴⁰⁹ Rāma,⁴¹⁰ Rāmāśrama,⁴¹¹ Rantideva,⁴¹² *Rasaratnasamuccaya*, *Rasāyanaprayoga*,⁴¹³ *Ratna*koṣa,⁴¹⁴ Rudra,⁴¹⁵ Rūpanārāyaṇa,⁴¹⁶ *Śabdārṇava*,⁴¹⁷ *Saṅgraha*,⁴¹⁸ sāmyātrikālī,⁴¹⁹ Śāśvata,⁴²⁰ *Siddhamantra*,⁴²¹ *Siddhamantraprakāśa*,⁴²² Siṃha,⁴²³ Somanandin,⁴²⁴ *Śrīngārāhāra*,⁴²⁵ Śubhāṅka,⁴²⁶ Subhūti,⁴²⁷ Suśruta, *Sūtra*,⁴²⁸ Svāmīn,⁴²⁹ Tārapāla,⁴³⁰ *Trikāṇḍaśeṣa*,⁴³¹ Ujjvaladatta,⁴³² *Utpalīnī*,⁴³³ Vācaspati,⁴³⁴ Vāgbhaṭa, *Vaijayanī*,⁴³⁵ Vāpyacandra, *Vidagdhamukhamāṇḍana*,⁴³⁶ *Vidvadvaidyavallabhā*,⁴³⁷ Viśva,⁴³⁸ *Viśvalocana*,⁴³⁹ Viṭṭhalakṛṣṇabhaṭṭa,⁴⁴⁰ *Vopālīta*,⁴⁴¹ vṛddhāh, and Vyāḍī.⁴⁴²

The author

Śivadatta⁴⁴³ was the son of Caturbhujā,⁴⁴⁴ who belonged to the Karpūra family.⁴⁴⁵ He got his training in āyurveda from his father.⁴⁴⁶ Śivadatta's son, Kṛṣṇadatta, wrote a commentary on Trimalla's *Saśāloki*.⁴⁴⁷ Śivadattamiśra may have joined other paṇḍits of Benares in congratulating Kavīndrācārya Sarasvatī for his successful efforts in getting the pilgrim tax at Benares, reimposed by the emperor Shāh Jahān, remitted.⁴⁴⁸

Date

As indicated at the end of the work, the *Śivakoṣa* was completed in A.D. 1677/78.

Śivamiśra

Śivamiśra was the author of the *Vaidyāśāstraśivānubhava*, a work of a compilatory character in five sections.⁴⁴⁹

The first section, dealing with the aetiology and symptomatology of diseases, closely agrees with the *Mādhavanidāna*. The second section discusses some general subjects first, but is mainly devoted to therapy and consists of prescriptions which include rasas; it has also a chapter, called vīryastambhanādyadhikāra, which contains formulae to increase the size of the penis in men and that of the breasts in women, to promote potency in men and fertility in women, etc., as usual in medical treatises of later periods; it describes sneha, vamaṇa, virecana and related subjects as well. The third section is concerned with the purification of mercury, some metals, etc., and with the preparation of medicines containing chiefly inorganic substances. The fourth section deals with the medicinal qualities of foods, and the fifth section with the substitutes for a number of drugs. The work ends with verses on karmavipākā.

Sources referred to are: *Bhāvaprakāśa*, *Cakradatta*, Caraka, Gorakṣa, Kunda(?), Mādhavakara, *Rājamārtāṇḍa*, *Rasabhāskara*, *Rasadarpaṇa*, Śārṅgadhara, Śivadāsa,

Śrīśailanātha, Vacasiṃha(?), Vāgbhaṭa, and Vṛnda.

The *Śivānubhava* is one of the sources of the *Bṛhadrasarājasundara*.

The introductory verses give the following genealogy of the author: Gaṅgādhara (well versed in āyurveda, of Śāṇḍilyagotra, belonging to a Śākadvīpa family living in Bhalunīpura of the Dānavāri region)—Saśidhara—Divākara—Narahari—Haricandra—Hari—Śivamiśra.

Śivamiśra states that he wrote his work at the request of some famous physicians connected with the court of Shāh Salem (i.e., Akbar's son Salīm, who assumed the title of Jahāngīr after his accession to the throne).

The date of the work is indicated in the text as the year 1661 of the Vikrama era, i.e., A.D. 1604/05.

Trimallabhaṭṭa

Trimallabhaṭṭa was the author of four medical works: (1) *Yogatarāṅgiṇī*,⁴⁵⁰ (2) *Bṛhadyogatarāṅgiṇī*,⁴⁵¹ (3) *Vaidyacandrodaya*,⁴⁵² and (4) *Dravyaguṇasātaśloki*.⁴⁵³ He also wrote the *Alaṃkāramāñjarī*,⁴⁵⁴ *Vṛttamāñikyamālā*,⁴⁵⁵ and, according to some, the *Yogacandrikā*⁴⁵⁶ and a commentary on Sukhalatā's *Śataśloki*.⁴⁵⁷ His authorship of the *Rasadarpaṇa* is disputed.⁴⁵⁸

(1) The *Yogatarāṅgiṇī*⁴⁵⁹ is a treatise of about 2,750 verses, arranged in eighty-one chapters (taraṅga). Chapter one is of an introductory nature and deals, amongst other things, with the triḍoṣa doctrine. Chapter two is about weights and measures; it reproduces *Śārṅgadharasaṃhitā* I.1. 14cd–44ab and 39cd–42 without mentioning this source; some verses from *Kṛṣṇātreya* are quoted at the end. Chapter three contains rules for the preparation of medicines and enumerates a number of substitutes for particular medicinal substances; 3.1–9 is identical with *Śārṅgadharasaṃhitā* I.1.44–45. Chapter four is about medicines with a fatty basis (sneha); the verses are partly from *Śārṅgadharasaṃhitā* III.1. Chapters five to nine describe the five procedures belonging to pañcakarman: sveda, vamaṇa, virecana, basti and nasya. The source of the larger part of these chapters is the *Śārṅgadharasaṃhitā* again (III.2–8); the chapter on virecana adds some formulae, some of which are rasayogas. Chapters ten to eleven, on dhūmapāna and raktasruti (bloodletting), have, once again, been borrowed from the *Śārṅgadharasaṃhitā* (III.9 and 12). The next five chapters are devoted to nāḍīparīkṣā (12),⁴⁶⁰ vastra- and jihvāparīkṣā (13), chāyāpuruṣalakṣaṇa (the examination of one's shadow as a prognostic procedure) and mūtraparīkṣā (14), dūta- and malaparīkṣā (15),⁴⁶¹ netraparīkṣā,⁴⁶² śakuna (omina) and svapna (dreams) (16). Chapter seventeen is concerned with alchemy. Chapter eighteen is about the preparation of svarasa, kalka, kvātha, yavāgū and related fluids, bhakta and maṇḍa, phāṇṭa, śītakaṣāya, cūṛṇa, vaṭikā, and avaleha; it also enumerates groups of medicinal substances.

Chapters nineteen to seventy-eight deal with diseases and their treatment. Chapters seventy-nine and eighty are concerned with rasāyana and vājīkaraṇa. Chapter eighty-one describes the seasons and the regimen to be observed during each of them.

The diseases are enumerated at the beginning of chapter nineteen (1–9). Their order in the *Yogatarāṅgiṇī* is largely in agreement with the *Mādhavanidāna*. *Ānāha*, however, is not described, and referred to once only in a formula of the chapter on *udāvarta* (45.15). A chapter on *ūrustambha* is missing. Gynaecology and obstetrics are dealt with in three chapters, on *pradara*, *sūtikāroga*, and *strīroga*; *yonikanda* is not described, neither referred to. Diseases added to those mentioned in the *Mādhavanidāna* are *bhasmaka* (242.1–2), *kuraṇḍa* (55.2), *bradhna* (56.1), and *snāyuka* (67.1).

The verses on *nidāna* are in many cases few in number or, in rare cases, even absent.⁴⁶³ The majority have been borrowed from the *Mādhavanidāna*, either referred to by name or not;⁴⁶⁴ a minority are from other sources, some of which mentioned by name.⁴⁶⁵ The verses on therapy are arranged in such a way that the *rasayogas* follow upon *āyurvedic* prescriptions. Religious therapy and magic are also represented, especially in the chapters on *masūrīkā* (67), *sūtikāroga* (75), and *bālaroga* (77).

The *Yogatarāṅgiṇī* is a compilatory work⁴⁶⁶ that quotes a large number of sources. Nevertheless, as already indicated, numerous stanzas remain anonymous.

The sources of the *Yogatarāṅgiṇī*, as found in edition a, are: *Alaṃkāra* (44.1),⁴⁶⁷ *Ārogyadarpaṇa* (20.59–60, 113–114 and 123),⁴⁶⁸ *Aśvinīkumārasaṃhitā* (71.55–56),⁴⁶⁹ *Bauddhasarvasva* (17.62–69 and 79–84; 29.13–16; 64.6),⁴⁷⁰ *Bhallaṅka* (19.35–72),⁴⁷¹ *Cakradatta*⁴⁷² (20.1–4 and 11; 60.45–46; 75.4; 80.65–66), *Caraka* (27.15; 49.6–11), *Carpaṭī*⁴⁷³ (79.21), *Cikitsā* (21.24–25; 22.12; 23.44–46; 27.9–11; 70.3–4 and 11; 80.15),⁴⁷⁴ *Cikitsādīpa* (29.4),⁴⁷⁵ (Tīṣaṭa's) *Cikitsākalikā* (20.63; 21.15; 23.27–28),⁴⁷⁶ *Dhanvantari* (242.5–13),⁴⁷⁷ *Hārīta* (27.33–36), *Kalikā* (71.15, 25 and 63; 79.16),⁴⁷⁸ *Kṛṣṇātreya* (2.30–31; 70.15–16; 71.31),⁴⁷⁹ *Lolimarāja* (28.28),⁴⁸⁰ *Madanapāla*⁴⁸¹ (20.18–20), *Manthānabhairava* (24.44–53),⁴⁸² *Matimukura* (71.44 and 49), *Nāgārjuna* (14.13), *Nārāyaṇīya* (29.2),⁴⁸³ *pāścātyadeśāgatatayogin* (20.36–37), *Rājamārtāṇḍa* (244.8–9; 26.30; 34.5–6; 50.8; 57.19–21; 69.19; 71.26 and 32; 75.34; 76.3; 77.8 and 18; 79.8; 80.110), *Rasadarpaṇa* (3.12),⁴⁸⁴ *Rasamañjarī* (80.79–84),⁴⁸⁵ *Rasaratnapradīpa* (17.74–77; 23.52–53; 24.13–14; 25.1 and 29–31; 27.76–78; 28.21–25; 29.12; 32.8–11; 34.9; 38.23; 39.8–10; 41.1–2; 47.5; 50.1 and 11; 51.29; 64.13–14; 71.3; 80.79–84),⁴⁸⁶ *Rasārṇava* (24.35–43 and 54–59; 27.49–53), *Rasasindhu* (242.14–16), *Rasendracintāmaṇi* (243.1–3 and 21–24; 26.42–45; 41.39–40), *Rasendrasaṃhitā* (243.17–20), *Rugviniścaya* (244.1; 35.1; 37.1; 38.1–2; 50.2; 52.1–2; 60.1), *Samgraha*⁴⁸⁷ (44.11–14), *Sārasaṃgraha* (20.75, 85, 92, 157–158; 25.10–13; 27.54–57 and 72–75; 28.31–32; 30.6–10; 33.3; 34.7–8; 40.12–22; 41.24–25; 48.11–18; 51.19–21; 71.33 and 64–65; 81.1–14),⁴⁸⁸ *Śārngadhara* (20.48, 52, 57–58, 95, 111–112, 192–193; 27.42–48; 28.16–17; 30.2; 40.100–111 and 123–129; 41.16–20 and 33–38),⁴⁸⁹ *Sarvasaṃgraha*⁴⁹⁰ (25.4), *Saugatasīṃha*,⁴⁹¹ *Śivāgama* (14.2), *Suśruta* (23.7; 27.4–5; 29.3; 33.2; 50.4), *Vāgbhaṭa* (75.3 and 57–62), *Vaidyadarpaṇa*⁴⁹² (71.54), *Vaidyālaṃkāra* (69.21–25),⁴⁹³ *Vasantarāja*⁴⁹⁴ (17.58–61; 29.17), *Vīrasīṃhāvaloka*⁴⁹⁵ (24.13–17; 25.21),⁴⁹⁶ 34.1; 35.2–8; 38.20–21; 39.4–5), *Vṛnda* (20.29–32, 41, 45, 49, 62, 71, 74, 93–94, 103–106, 118, 176–177; 21.22–23 and 43; 22.7, 11, 22–23; 23.38–41; 24.19–22; 24.12; 25.2–3, 7–9, 27; 26.2–6; 28.11–15; 29.8–11; 30.1; 31.3–4; 33.5–7; 34.2–4; 38.22; 39.2–3; 40.26–28; 41.3, 5–6, 7–15, 32; 42.9 and 10–16; 43.1 and 6–11; 44.7–10; 45.5–6; 47.4;

48.10; 51.3 and 5–9; 53.1; 58.8; 62.26; 69.16; 77.40–41; 79.11; 80.10 and 32–36), *Yogaratra*⁴⁹⁹ (33.4), *Yogaratanpradīpa*⁵⁰⁰ (71.62), *Yogaratanāvalī* (20.81–82; 21.42; 22.26–27; 23.49; 24.23; 25.27; 26.13–16; 28.26–27; 39.6–7; 40.2–4; 41.22–23 and 26–31; 42.17–25; 64.7–8, 15–19, 25–26; 69.15; 70.14; 71.18–24 and 46–48; 72.5–6), *Yogasāra* (25.14 and 15–18), and *Yogaśāta* (20.40, 46–47, 65, 115; 244.2; 27.12–14; 50.9; 51.4).

The Hindī commentator of ed. a adds: *Ātreya* (8.31–40), *Brhadātreya* (8.31–40), *Goraṣa* (3.18), *Rasacintāmaṇi* (17.22–26), *Rudratātra* (15.4–10), *Vṛddhahārīta* (12.1–10), *Vṛddhaśaunaka* (3.22), *Yamalagrantha* (16.1–7), and *Yogapārījāta* (8.55–58). Ed. b⁵⁰¹ adds: *Brhadātreya* (8.31–40), *Prayogapārījāta* (8.49–54),⁵⁰² *Rudratātra* (15.4–10),⁵⁰³ *Tisatācārya* (1.42–54), *Vṛddhahārīta* (12.1–10),⁵⁰⁴ and *Yāmala* (16.1–7).⁵⁰⁵ A. Rahman⁵⁰⁶ adds *Goraṣamata* and *Rasamārga*. The NCC mentions the *Pṛyūṣasāgara* as a work quoted in the *Yogatarāṅgiṇī*.⁵⁰⁷

Some of the sources of the *Yogatarāṅgiṇī* are not referred to in the *Brhadhyogatarāṅgiṇī*. This need not imply that these sources were not employed in compiling the *Brhadhyogatarāṅgiṇī* because both texts contain a large number of unidentified verses. Part of these can be identified by comparing the *Yogatarāṅgiṇī* with the *Brhadhyogatarāṅgiṇī*.⁵⁰⁸ This enables us to determine at least two more sources of the *Yogatarāṅgiṇī*: *Bhadraśaunaka* and *Goraṣamata*.⁵⁰⁹ A comparison of both works also shows that there are very numerous variants in the readings of essentially the same verses.

The *Yogatarāṅgiṇī* is one of the sources of the *Bheṣajasaṃhitā*, Dattarāma's *Brhadrasarājasundara*, Devasiṃha Viṭṭhal's *Brhadāsavāriṣṭasaṃgraha*, Mādhava's *Āyurvedaprakāśa*, Pratāpasimha's *Amṛtasāgara*, Raṅgajyotirvid's *Vicārasudhākara*, Viśvanātha Dvivedī's *Rasendrasambhava*, and the *Rasoddhātatantra*.

The *Yogatarāṅgiṇī* is quoted in Hanumatprasāda's commentary on the *Siddhabhaiṣajyamañjūsā*, Khare's commentary on the *Rasaratanasamuccaya*, Niraṅjanaprasāda Gupta's *Pāradasaṃhitā*, the *Rasatattvavivecana*, Śāma's *Sārasaṃgrahatarāṅgiṇī*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Vidyāpati's *Vaidyarahasya*, and the *Yogaratanākara*. The *Laghuyogatarāṅgiṇī* (i.e., the *Yogatarāṅgiṇī*) is quoted in Mādhava's *Āyurvedaprakāśa* and the *Rasāyanaśaṃgraha*.⁵¹⁰

Chapter three (3.25–27) informs us of the discount on fresh or prepared drugs available to vaidyas; this discount, called *dhānvantarabhāga* or *rudrabhāga*, was one-eleventh with respect to fresh drugs and 12.5 to 50 percent of the cost of prepared medicines.⁵¹¹ Homage has to be paid to Vighneśa, Kṣetrapāla and Baṭuka before starting the process of *snehapāka* (4.21–22).⁵¹² A form of sudation called *vṛhijanyasveda* has been added to the usual series (5.29).⁵¹³ Among the ways of examining a patient the unusual process of *vastraparīkṣā* is described (13.1–4).⁵¹⁴ The examination of one's shadow (*chāyāpuruṣa*) is described among the forms of *parīkṣā* (14.1–11);⁵¹⁵ it provides information on the chances of recovery or the time span left to a patient until his death; the verses on this subject are from the *Śivāgama*. Syphilis, although not separately described, is referred to at least once as *phiraṅga* (17.69). The preparation of *rasakarpūra*, often used as a specific against syphilis, is described (17.62–69), quoted from the *Bauddhasarvasva*.⁵¹⁶ The symptoms of one series of thirteen *saṃnipāta* fevers⁵¹⁷ are

described, followed by abhinyāsa fever (19.36–72 and 78–79); the members of the series are viddha,⁵¹⁸ bhalla,⁵¹⁹ śarkara, visphuraka,⁵²⁰ śighrakārin,⁵²¹ phamphaṇaka,⁵²² karṇamūla,⁵²³ karkaṭaka,⁵²⁴ saṃmohaka,⁵²⁵ saṃgrāma,⁵²⁶ krakaca,⁵²⁷ pākala, and kūṭapākala;⁵²⁸ the therapy of these fevers is not dealt with. A particular rasayoga (aśvaka-ñcukīrasa: 20.36–37) is said to derive from a yogin who came from a western country (pāścātyadeśāgatayogin).⁵²⁹ The way of preparing a mineral acid or mixture of mineral acids (śaṅkhadrāva) is described (24.1.29–34).⁵³⁰ The disease called bhasmaka is mentioned (24.1.2).⁵³¹ Parīṇāmasūla is said to be of eight types in a verse quoted from the *Alaṃkāra* (44.1).⁵³² The disease called kuraṇḍa is mentioned (55.2).⁵³³ The disease called bradhma is dealt with in a separate chapter (56).⁵³⁴ The disease called snāyuka (67.1–4)⁵³⁵ is described in the same chapter as masūrikā. The verses on māsurikā mention in passing the type called kodravaka (67.9),⁵³⁶ as well as the appeasement of the goddesses Śītālā and Caṇḍī as therapeutic measures in cases of masūrikā (67.10–11).⁵³⁷ Anticonceptive (75.8–15) and abortifacient measures (75.16–19) are described.⁵³⁸ The bālagrahas, taking possession of a child on the first, second, etc., day, in the first, second, etc., month or year of its life, are called Nandā, Sunandā, Pūtanā, Maṇḍitikā,⁵³⁹ Pūtanā, Śakunī, Śuṣkarevatī, Āryakā, Sūtikā, Nirṛti,⁵⁴⁰ Pilipīṇḍikā,⁵⁴¹ and Kāmukā (77.1–12).⁵⁴² Noteworthy medicinal substances repeatedly prescribed by Trimalla are ahiphena (opium), bhaṅgā (Cannabis) and mastagī; other interesting names of drugs are candraśūra (62.30), kulīñjana (62.28), and pāṭīra (64.6).⁵⁴³

(2) The *Bṛhadhyogatarāṅgiṇī*⁵⁴⁴ is much longer than the *Yogatarāṅgiṇī* and consists of about 10,000 verses, arranged in 148 chapters (taraṅga). It is in many respects an expanded version of the *Yogatarāṅgiṇī*, but it not only adds to the text of the latter. Many instances can be found of sequences of verses replaced by material from a different source,⁵⁴⁵ and, less frequently, verses incorporated in the *Yogatarāṅgiṇī* are omitted altogether from the *Bṛhadhyogatarāṅgiṇī*.⁵⁴⁶ Stanzas occurring in both texts often show variant readings. The *Bṛhadhyogatarāṅgiṇī* contains some prose⁵⁴⁷ and a number of glosses.⁵⁴⁸

The verses on therapy are arranged in the same way as in the *Yogatarāṅgiṇī*; āyurvedic prescriptions precede the rasayogas. Religious therapy and magic, such as mantras and yantras, are especially represented in the chapters on masūrikā (126), mūḥhagarbha (140), bālaroga (144), and viṣa (145).

The *Bṛhadhyogatarāṅgiṇī* differs from the *Yogatarāṅgiṇī* in many respects. A chapter on embryology and anatomy is added (2). The chapter on weights and measures gives at the end a verse from Matimukura. Chapter four, identical with chapter three of the *Yogatarāṅgiṇī*, refers to a number of sources. Chapter five, on snehapāna, longer than the corresponding chapter of the *Yogatarāṅgiṇī*, mentions some sources (Śārngadhara, Caraka, *Yogaratnāvalī*, *Vaidyālaṃkāra*, and Matimukura). Chapters six to twelve resemble chapters five to eleven of the *Yogatarāṅgiṇī*, but some are somewhat longer. Chapters thirteen and fourteen are additions, concerned with the royal kitchen. Chapter fifteen, on the regimen during the seasons, differs from the corresponding chapter (81) at the very end of the *Yogatarāṅgiṇī*; the descriptions of the seasons do not tally and their order is dissimilar.⁵⁴⁹ Chapter sixteen, on prepared foods

(siddhāna),⁵⁵⁰ is an addition again, as well as chapters seventeen on dinacaryā, eighteen on rātricaryā, and nineteen on rasa, vīrya, vipāka, and prabhāva. Chapters twenty to thirty-seven form a nighaṇṭu, not found in the *Yogataraṅgiṇī*; they contain, usually without describing a drug and giving its synonyms,⁵⁵¹ enumerations of the medicinal properties of numerous articles of food and drugs; the subjects of these chapters are: dugdha, dadhi, takra, navaṇṭa, ghr̥ta, taila, madya, ikṣu, madhu, śālyādi, phala, śāka, māṇṣa, haritakyādi, vaṭādi, śuṇṭhyādi, and karpūrādi. Chapters added are thirty-eight on definitions of actions of drugs (pācanādi),⁵⁵² thirty-nine on incompatible articles of food (viruddhāhāra), and forty on eighteen groups of drugs (rāsnādigaṇa). Chapters forty-one to forty-three on rasaśāstra (alchemy) are much more elaborate than the corresponding chapter (17) of the *Yogataraṅgiṇī*. The seven kañcukas of mercury and the disorders caused by them are described according to the *Bauddhasarvasva*; their names are mṛd, pāṣaṇa, jala, kālī, kāpālikā, śyāmā, and kapālikā (42.13–15ab).⁵⁵³ The twenty saṃskāras of mercury, as mentioned in the *Śivāgama*, are enumerated (42.18): paṭasāraṇa,⁵⁵⁴ saṃmardana, mūrchana, utthāpana, sveda,⁵⁵⁵ pātana, bodhana, niyamana, dīpana, mukhakarāṇa, jāraṇa, saviḍā, māna, garbhadruti, rañjana, vedhana, bahirdruti, sārāṇa, krāmaṇa, and māraṇa. The uparasas listed are (43.1–2): gandhaka, vajra, vaikrānta, sindūra, bola,⁵⁵⁶ gairika, samudraphena, khaṭikādvaya,⁵⁵⁷ śambūka, tārkṣya, kāsisa, kāntapāṣaṇa, varāṭī, śukti, hīṅgula, kaṅkuṣṭha,⁵⁵⁸ śaṅkha, bhūnāga, taṅkaṇa,⁵⁵⁹ and śilājatu. Four minor gems are enumerated: muktā, vidrūma, śaṅkha and rājāvarta (43.82). Chapter forty-four on aṣṭajñāna is for its larger part an addition, consisting of quotations from the *Yūpasāgara* and *Rasamañjarī*; it also deals with the prognosis by means of one's shadow (chāyāpuruṣa), in the same words as in chapter fourteen of the *Yogataraṅgiṇī*. Chapters forty-five to fifty-three are about the various forms of parīkṣā, as chapters twelve to sixteen of the *Yogataraṅgiṇī* are; the subjects are partly differently and more elaborately described than in the *Yogataraṅgiṇī*; vastraparīkṣā is omitted, but, on the other hand, varṇa- and svaraparīkṣā have been added. Chapter fifty-four, on some aṣṭas, is an addition. The same applies to chapter fifty-five on the most auspicious times for collecting drugs and about the parts of the day, etc., on which a drug should be given to patients suffering from particular diseases; dosages are also mentioned. Chapter fifty-six, also added, is concerned with the signs indicating an increase or decrease of the doṣas, dhātus, and malas.

Chapters 57–145 are about diseases and their treatment. Chapter 146 describes combinations of articles of food which are regarded as incompatible (viruddhāhāra).⁵⁶⁰ Chapter 147 deals with vājīkaraṇa, and the last chapter, 148, enumerates the main drugs employed in each of the diseases mentioned.

Chapters 57–145 usually begin with reproducing the corresponding chapter of the *Mādhavanidāna*, to which sometimes verses are added,⁵⁶¹ while in rare cases verses found in the *Mādhavanidāna* are replaced by other ones.⁵⁶² The *Bṛhadhyogatarāṅgiṇī* mentions, more often than the *Mādhavanidāna*, the complications (upadrava) of a particular disease;⁵⁶³ the therapy of these complications is sometimes separately described.⁵⁶⁴

When compared with the *Yogataraṅgiṇī*, many differences strike the eye. The description of two series of thirteen saṃnipāta fevers; the members of the first series

(57.55–67) bear, one fever excepted (vyālākṛti replaces karṇamūla of the *Yogatarāṅgiṇī*), the same names as those found in the *Yogatarāṅgiṇī*, but their order slightly differs; more important, however, is that the descriptions, quoted from the *Priyūṣasāgara*, bear no resemblance at all to those occurring in the *Yogatarāṅgiṇī* and are not found in any other text known to me; the treatment of this series of fevers is not dealt with. The second series (55.76–88) consists of saṇḍhiga, antaka, rugdāha, cittabhrama, karṇaka, kaṇṭhakubja, śītāṅga, tandrika, pralāpaka, raktaṣṭhivīn, bhugnanetra, abhinyāsa, and jihvaka; the descriptions of these fevers are, antaka excepted, identical with those of Śārṅgadharā's *Triṣaṭī*;⁵⁶⁵ Trimalla's description of antaka is not found in any other text; the verses on the treatment of these fevers (59.69–155) are borrowed from Śārṅgadharā's *Triṣaṭī* again.⁵⁶⁶ The addition of a chapter on jvarātisāra (65).⁵⁶⁷ The description of daṇḍālasaka (71.20).⁵⁶⁸ A description of bhasmaka (71.24–25) that is different from that of the *Yogatarāṅgiṇī*.⁵⁶⁹ The description of suptavāta under the name of tvakśūnyatā (90.267cd–268).⁵⁷⁰ A separate chapter on ūrustambha (92). A separate chapter on the treatment of ānāha (97). The verse on kuraṇḍa of the *Yogatarāṅgiṇī* (55.2) is absent, but the same disease (kuraṇḍa, korāṇḍa) is referred to in the verses on the therapy of vṛddhi (107.36 and 38). The definition of bradhna (107.13)⁵⁷¹ differs from that found in the *Yogatarāṅgiṇī* (56.1); it is also called vardhma (107.46–47). The description of stanavidradhi (110.28–29).⁵⁷² The description, in prose, of agnidagdhavraṇa (113). The description of a dāruṇa type of upadaṁṣa, occurring in both men and women (117.8cd–9). The description of the aetiology, symptoms and treatment of a venereal disease called rativraṇa,⁵⁷³ and of the intoxication brought about by the abuse of mercurial preparations (sūtadoṣa) (118).⁵⁷⁴ A separate chapter on snāyuka (124). The addition of an adhiḱāra on śītālā to the chapter on masūrikā (126.78–105); this adhiḱāra also contains the well-known hymn to Śītālā from the *Kāśīkhaṇḍa* of the *Skandapurāṇa*. The number of chapters on gynaecology and obstetrics (133–143) is much larger than in the *Yogatarāṅgiṇī*. The addition of a chapter on somaroga and mūtrātisāra (135).⁵⁷⁵ The addition of a chapter on strīdveṣa (136), taken from Nāgārjuna's *Yogasāra*.⁵⁷⁶ The addition of a chapter on yonikanda (138). The addition of a chapter on makkalla (141).⁵⁷⁷ The insertion of the pūtanāvidhāna from Rāvaṇa's *Kaumāratāntra* in the chapter on children's diseases (144).

Chapters sixteen and twenty to thirty-seven, which form a nighaṇṭu, incorporated in the *Bṛhadyogatarāṅgiṇī*, are based on the *Madanapālanighaṇṭu*. Trimalla quotes Madanapāla's verses on the properties of medicinal substances and articles of food, mostly omitting to enumerate their synonyms. The order of Madanapāla's chapters has been changed by Trimalla; some substances are absent,⁵⁷⁸ while other ones were added by him.⁵⁷⁹ In rare cases a verse differs completely from the corresponding one in the *Madanapālanighaṇṭu*.⁵⁸⁰ Worthy of note is Trimalla's distinction of āḍhakī (30.30) and tuvarī (30.44ab),⁵⁸¹ garjara (32.69) and grṇjana (32.80cd–81ab).⁵⁸² Some names do not agree with those occurring in the *Madanapālanighaṇṭu*.⁵⁸³ Vernacular names are also mentioned.⁵⁸⁴ Chapter sixteen, which belongs to the nighaṇṭu of the *Bṛhadyogatarāṅgiṇī*, has, at least for its major part, not been borrowed from the *Madanapālanighaṇṭu*, although it shares a number of verses with it.⁵⁸⁵

A few medicinal substances, prescribed in the *Bṛhadyogatarāṅgiṇī*, are absent from

the *nighaṇṭu* chapters, e.g., *ākalla* (118.21), *ākārakarabha* (117.32), *dvīpottharāśnā* (91.86),⁵⁸⁶ *postaka* (118.7), *śāṅkhopala* (117.37), and *śivaliṅgī* (139.18). Chapter forty-one does not mention zinc (*yaśada*) among the metals.

The *Bṛhadhyogatarāṅgiṇī* refers to and quotes from the following authorities and sources: *Āgama* (42.228–233),⁵⁸⁷ *Ārogyadarpaṇa* (59.35–36 and 219–220), *Āśvineya* (84.31–41),⁵⁸⁸ *Bauddhasarvasva* (42.13–15ab; 79.33–36; 90.232–234), *Bhadrāsauṇaka* (4.21ef–26ab),⁵⁸⁹ *Bhāradvāja* (139.28–37),⁵⁹⁰ *Bhāvaprakāśa* (131.183–185),⁵⁹¹ *Bheda* (32.30ab),⁵⁹² *Bhoja* (18.30–31ab and 33ab; 116.5–11),⁵⁹³ *Bṛhadātreyā* (9.34cd–44),⁵⁹⁴ *Caraka* (5.26–36ab; 58.16; 76.76; 101.33–39ab; 106.74–75; 129.37–38), *Cikitsā* (69.29–31), (*Tisāṭa*'s) *Cikitsākalikā* (59.39; 76.55–58), *Gorakṣamata* (4.11cd–18ab and 19cd–21cd; 42.12), *Gorakṣanātha* (81.28–30), *Govindapādāh* (42.126),⁵⁹⁵ *Hārīta* (1.11; 13.36), *Jaijyāta* (106.74–75),⁵⁹⁶ *Kṛṣṇātreyā* (3.31–34ab; 9.66cd–27ab), *Mādhava* (120.284–286),⁵⁹⁷ *Manthānabhairava* (71.39–48), *Matimukura* (3.33cd–34ab; 5.39cd–40ab), *Nāgārjuna*,⁵⁹⁸ *Nalapāka* (16.5–7ab),⁵⁹⁹ *Nārāyaṇīya* (79.17–22), *Nighaṇṭa* (gloss ad 108.46),⁶⁰⁰ *Nityanātha* (147.236–240),⁶⁰¹ *Pīyūṣasāgara*,⁶⁰² (41.92ab),⁶⁰³ *Pradīpa* (79.24),⁶⁰⁴ *Prayogapārijāta* (9.62–65),⁶⁰⁵ *Rājamārtaṇḍa* (73.19–32; 75.37; 131.136 and 139; 147.452–454), *Rasacintāmaṇi* (42.180–184),⁶⁰⁶ *Rasamañjarī* (41.37cd–38ab and 42–49; 44.25–29 and 30–40; 48.4–7), *Rasāmṛta* (122.51cd–54),⁶⁰⁷ *Rasarājalakṣmī* (42.245–250),⁶⁰⁸ *Rasaratnākara* (118.15–22 or 18cd–22),⁶⁰⁹ *Rasaratnapradīpa*,⁶¹⁰ (8.47–48; 59.320–321 and 326–328; 74.58–60; 76.128–130; 79.32; 88.87cdef; 94.77–78), *Rasārṇava* (41.96–99ab; 42.3–8ab; 71.121–126; 76.117–121), *Rasasindhu* (60.41–49), *Rasendracintāmaṇi* (42.17, 64–66, 71cd–74ab, 85–89; 59.31–34ab; 60.1–11; 71.149–152 and 157–160ab; 75.104–106; 77.42–47ab), *Rasendrasaṃhitā* (71.153–156), *Ratnapradīpa* (73.36–40),⁶¹¹ *Rāvana*'s *Kaumāratantra* (144.81–104),⁶¹² *Rugviniścaya* (75.2–10ab), *Sārasaṃgraha* (5.19–25(?); 8.46; 59.67 and 305–306; 76.122–124; 147.211–215), *Śārngadhara* (3.27cd–30; 4.1–11ab; 5.1–18; 8.45; 12.21cd–24; 47.30–41; 49.4–8; 59.19 and 326–28–29ab; 77.47cd–52ab; 91.73–79), *Siddhalakṣmīśvaratantra* (42.91–99),⁶¹³ *Siddhamata* (42.10–11ab),⁶¹⁴ *Śivāgama* (42.15cd–16, 18, 68–71ab, and 251–255), *Sudhāsāgara* (50.3–5ab),⁶¹⁵ *Suśruta* (2.139cd–192ab; 13.36; 56.69cd–75; 58.17; 76.27–37; 79.23; 129.37–38), *Tisāṭa* (1.49–60b; 145.80–85),⁶¹⁶ *Vāgbhaṭa* (1.12–48; 2.197cd–200 and 202–203; 44.1–6; 56.10–14; 58.58–60; 90; 128.105–108ab), *Vaidyālaṃkāra* (4.18cd–19ab and 26cd–32; 5.38cd–39ab), *Vaidyavilāsa* (107.28cd–33),⁶¹⁷ *Vasantarāja* (79.37–38; 147.419–425), *Vaśiṣṭhasaṃhitā* (2.50cd),⁶¹⁸ *Videha* (13.28cd–32ab; 58.71; 131.171–174ab),⁶¹⁹ *Vṛddhasuśruta* (20.53–55),⁶²⁰ *Vṛddhavāgbhaṭa* (58.54 and 69–70),⁶²¹ *Vṛnda* (59.17, 21–23ab, 38, 48–52, 201–204, 334–337; 79.25–31; 88.72; 95.50–54ab; 147.216–222), *Yogarātnāvalī* (5.36cd–38ab; 6.1–30; 59.62–63; 78.88cd–90ab; 122.44–45 and 46–51ab), *Yogasāra* (136.1; 147.167–170), *Yogaśāta* (59.16 and 40–41; 73.17–18; 103.74–76), and *Yūpasāgara* (44.7–24).⁶²³ To this list have to be added, according to P.V. Sharma,⁶²⁴ the *Bheṣajatantra* and *Gaurīmata*.

The *Bṛhadhyogatarāṅgiṇī* is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasamhitā*, *Bṛhannighaṇṭuratnākara*, Khare's commentary on the *Rasaratnasamuccaya*, the *Pāradasaṃhitā*, *Rasoddhātatantra*, *Rasayogasāgara* and *Rasatattvavivēcana*. It is one of the sources of Hariśaraṇāṇanda's *Kūpīpakvarasānirmāṇavijñāna*.

(3) The *Vaidyacandrodaya*⁶²⁵ is a treatise on nidāna⁶²⁶ in 340 skillfully composed stanzas, arranged in eighty-two chapters (avaloka). The verses are in sragdharā metre, those of the final chapter excepted, which are ślokas.

The first chapter is of an introductory character. Chapters two to seventeen are concerned with the messenger who is sent to the physician (dūta; 2), omnia (śakuna; 3), embryology and anatomy (śārīra; 4), signs foreboding death (kālabodha; 5), the examination of the urine (mūtraparīkṣā) by means of a drop of oil (tailabindu; 6), the examination of the stools (malaparīkṣā; 7), the examination of the eyes (dṛṣṭiparīkṣā; 8), the examination of the pulse (nāḍiparīkṣā; 9), the characteristics of incurability (asādhya; 10), the examination of the complexion (varṇa) and voice (svara) of a patient (11), the characteristics of diseases suitable to palliative treatment (yāpya) and of curable (sādhya) diseases (12), the causes of excitement of vāta, pitta, kapha, and all three doṣas simultaneously (13–16), and nidānapañcaka, i.e., hetu, prāgrūpa, rūpa, upaśaya and saṃprāpti (17).

Chapters eighteen to eighty-one deal with the nidāna of the various diseases. Trimalla states⁶²⁷ that he adopted the order of the diseases established by Mādhava. In spite of this statement the arrangement of the *Vaidyacandrodaya* shows some minor divergences: the addition of chapters on pittaroga (41) and kapharoga (42) after the chapter on vātaroga; the addition of a chapter on piḍikā (43); a different order of the chapters on śopha, ślīpada and kuraṇḍa⁶²⁸ (57), vṛṇaśoṭha (58), sadyovṛṇa, bhagna and nāḍivṛṇa (59), bhagandara (60), galagaṇḍa, gaṇḍamālā, apacī, granthi and arbuda (61), and vidradhi (62); the omission of a chapter on visphoṭa, and the omission of chapters on stanaroga and stanyaduṣṭi. Other differences are: the addition of bhasmaka in the chapter on agniroga (22); the addition of daṇḍājīrṇa (verse 110) to the types of ajīrṇa mentioned by Mādhava; the comparison of the eight major diseases with a king, surrounded by his courtiers (verse 131); the enumeration of the eighty vāta diseases.

The last chapter consists of an enumeration of all the diseases dealt with in the treatise.

(4) The *Śataśloki*⁶²⁹ is a work on the medicinal properties and uses of articles of food and some other substances of daily use. Its style is that of a medical kāvya; its 101 verses are mostly composed in long metres, while the śloka is completely absent.⁶³⁰ Various alaṃkāras are employed by Trimalla.⁶³¹

The substances dealt with are divided into fifteen groups (varga):⁶³² (1) water (jala; 3–10),⁶³³ (2) milk and dairy produce (dugdha; 11–22),⁶³⁴ (3) grain and pulse (dhānya; 22–26), (4) meat (māṃsa; 27–38), (5) vegetables (śāka; 39–49), (6) the sugarcane and its products (ikṣu; 50–51), (7) honey (madhu; 52), (8) oils (taila; 53–55), (9) fruits (phala; 56–67), (10) spices and condiments (śuṇṭhyādi; 68–73), (11) prepared dishes (kṛtāṇna; 74–89), (12) fermented liquids (madya; 91), (13) abhyaṅgādi (substances used for massage and bathing; 92), (14) tāmbūlādi (93–95), (15) inorganic substances (suvārṇādi; 96–100).⁶³⁵

Some interesting prepared foods (kṛtāṇna) described by Trimalla are jalavalaya (85)⁶³⁶ (i.e., jalebī) and puṣpavaṭī (81).⁶³⁷

Commentaries on the *Śataśloki* were written by Kṛṣṇadattamiśra, Balabhadra,⁶³⁸ Rūpacandra,⁶³⁹ and Gopāla.⁶⁴⁰ A *Trimallaṭīkā*, probably a commentary on the *Śataśloki*, is quoted in the *Tāmbūlamañjarī*.

Interesting features of Kṛṣṇadatta's commentary, called *Dravyadīpikā*, are: godhūma is of three types: mahāgodhūma, madhūlī and nandīmukhī; mudga is of two types: kṣetramudga and vanamudga; masūra is of two types: a black type called masūra, and a pale type called maṅgalya; kalāya is of two types: tripuṭa and vartula; śaṇa is of two types: śaṇa and paṭaśaṇa; kodrava is of two types: kodrava and vanakodrava, also called uddālaka⁶⁴¹ or yāvanāla; śyāmāka is of three types: toya-, uṣṭra-, and hastiśyāmāka.⁶⁴²

Kṛṣṇadattasometimes tries to reconcile conflicting statements found in earlier treatises by tortuous arguments, while in other cases he decides in favour of one of the early authorities.⁶⁴³

Kṛṣṇadatta gives ample proof that he was well versed in grammar.

Authorities and works quoted or referred to by him are: *Abhidhānacūḍāmañi*, *Agniveśaśāstra*, Amara, Aruṇadatta, Bhāvamiśra, Brahmadeva, Cakrapāṇi, Caraka, Ḍaḥaṇa, *Dhanvantarīnighaṇṭu*, Gayadāsa, Hārīta, Hemādri, Jaijñāta, Kaiyadeva, Khāranādi, Locana,⁶⁴⁴ Mādhavakāra ('s *Dravyaguṇa*), Medinī, *Mitākṣarā*, Muni, *Nairukta*, *Nighaṇṭu*, *Śabdārṇava*, *Samgraha*, *Samgrahabodha*,⁶⁴⁵ *Sārasamgraha*, *Siddhamantraprakāśa*, Sīrṇha, Suśruta, *Trikāṇḍaśeṣa*, *Triṣaṭīṭīkā*, Trivikrama, Vāgbhaṭa, *Vāgbhaṭī-yasamgrahabodha*,⁶⁴⁶ Vāpyacandra, and Vyādi.⁶⁴⁷

Kṛṣṇadattamiśra was the son of Śivadattamiśra, the author of the *Śivakoṣa*. He was born in Kāśī, but settled probably in the Pañjāb.⁶⁴⁸ His commentary may have been composed around A.D. 1700.

The author

Trimalla(bhaṭṭa),⁶⁴⁹ a brāhmaṇa,⁶⁵⁰ was the eldest of the three sons of Vallabha,⁶⁵¹ a specialist in Vedic studies, and a grandson of Siṅgaṇṇabhaṭṭa,⁶⁵² who lived in Kāśī. The latter was a famous man, honoured by kings, a devotee of Śiva, of a family of Āpastambas surnamed Āravella,⁶⁵³ and coming originally from Koḍapallī⁶⁵⁴ in the Telugu country.⁶⁵⁵

Trimalla wrote his works in Tripurāntakanagara.⁶⁵⁶ He sometimes refers to his guru, without mentioning his name.⁶⁵⁷ Trimalla's son Śaṅkarabhaṭṭa was the author of the *Rasapradīpa*.⁶⁵⁸

Date

Trimalla's chronological position has been a matter of controversy. Some authors assign him to the period between A.D. 1382/83 and 1498/99.⁶⁵⁹ This dating, proposed for the first time by H.D. Velankar,⁶⁶⁰ is based on the quotations from the *Vīrasīṃhāvaloka*⁶⁶¹ in the *Yogatarāṅgiṇī* and the date of completion of a MS of Trimalla's *Śataśloki*, described by Rājendraśāl Mitra.⁶⁶² Atrideva⁶⁶³ was of the opinion that Trimalla lived in the period between the *Śārngadharaśaṇhitā* and Bhāvamiśra's *Bhāvaprakāśa*, because the former is quoted, and because the term phiraṅgaroga, appearing for the first time in the *Bhāvaprakāśa*, is not yet employed by him.⁶⁶⁴ On the latter point Atrideva

is wrong, which invalidates his conclusion that Trimalla composed his works in the beginning of the sixteenth century. B. Tripāthī⁶⁶⁵ has advanced the view that Trimalla is somewhat later than Lolimbarāja, who is quoted by him. Bhagvat Sinh Jee's date of composition⁶⁶⁶ of the *Yogataraṅgiṇī*, A.D. 1751, is much too late since the work is quoted in Vidyāpati's *Vaidyarahasya*.

P.V. Sharma has brought forward that Trimalla must have flourished in the middle of the seventeenth century,⁶⁶⁷ because Bhāvamiśra and Lolimbarāja are quoted by him, and the *Yogaratnākara*, dating in his opinion from the last part of the seventeenth century, quotes the *Yogataraṅgiṇī*.

There is much in favour of this view, which implies that the dating of the Calcutta MS of the *Śataśloki* must be regarded as untrustworthy.

P. Hymavathi is convinced that Trimalla belonged to the second half of the sixteenth century; his arguments are that Trimalla quotes the *Bhāvaprakāśa*, while the *Yogaratnākara* is acquainted with Trimalla's works.⁶⁶⁸ As a corroborative piece of evidence, he refers to a grant of land to Trimalla's brother Rāma, made in A.D. 1580.⁶⁶⁹

Some early MSS of works by Trimalla were completed in 1646/47,⁶⁷⁰ 1658,⁶⁷¹ 1663/64,⁶⁷² and 1668/69.⁶⁷³ The lower limit of the period of Trimalla's literary activity, provided by these dates, is confirmed by quotations from Trimalla and his *Yogataraṅgiṇī* in Vidyāpati's *Vaidyarahasya*, dating from A.D. 1697/98.⁶⁷⁴ The upper limit must be about A.D. 1600, since Bhāvamiśra and Lolimbarāja are quoted by Trimalla. It can therefore be concluded that Trimalla flourished in the first half of the seventeenth century.

As pointed out by S.L. Katre,⁶⁷⁵ the edited text of the *Bṛhad-yogataraṅgiṇī* probably contains some material added to its original version, because Raghunātha's *Vaidyavilāsa*, composed towards the end of the seventeenth century, is quoted in it.

Vaṃśīdhara

Vaṃśīdhara,⁶⁷⁶ father of Vidyāpati,⁶⁷⁷ who composed the *Vaidyarahasya*, wrote the *Vaidyakutūhala*⁶⁷⁸ and *Vaidyamanotsava*.⁶⁷⁹ Since Vidyāpati composed his work towards the close of the seventeenth century, Vaṃśīdhara can be assigned to the third quarter of that century.

Vidyāpati

Vidyāpati was the author of the *Cikitsāñjana* and a therapeutic treatise with the title *Vaidyarahasya*.

*The Cikitsāñjana*⁶⁸⁰

The treatise consists of a collection of prescriptions and comprises 267 verses.⁶⁸¹ It opens with a maṅgala addressed to Arjuna, followed by two introductory verses. The author states in the second introductory verse that his work contains prescriptions from both prākṛta⁶⁸² and ancient physicians, as well as some tested by himself. The prescriptions are preceded by verses on the examination of the pulse (7–16) and urine (17–18),

on incurable disorders (19), and on the alleviation of excited *doṣas* (20–23).

The remaining part of the work deals with the treatment of a number of diseases which are inconveniently arranged, although Vidyāpati follows broadly Mādhava's order in his other treatise, the *Vaidyarahasya*. Some disorders are not dealt with at all, for example *raktapitta*, *vātarakta*, *upadamśa*, *śūkadoṣa*, *visarpa*, and *viṣa*. Also absent are *somaroga*, *śītalā* and *phiraṅga*, which are mentioned in the *Vaidyarahasya*; *snāyuka*, however, is present (182).

The prescriptions are mainly of the classical types, with a preference for those called *kvātha*, *cūrṇa* and *lepa*; some *rasayogas* are prescribed for the treatment of fevers.

The materia medica presents almost no particularities.

The last verse refers to the author's indebtedness to Nayanasukha's *Manomahotsava*.⁶⁸³

Vidyāpati included in his treatise a prescription against *lūtā* (167).⁶⁸⁴ A magical square (*yantra*), called *ṣaṭtriṃśaka*, is mentioned (228), which, drawn on a piece of birch bark and tied to the head, relieves headaches.⁶⁸⁵ The verses on women's diseases (233–251) are for the greater part devoted to subjects such as promoting fertility, preventing abortion, tightening the vagina, and increasing the firmness of the breasts, but some diseases, for example *fluor albus* and *mastitis* are also dealt with. The verses on disorders of the male (*puṃstvaroga*; 252–266) contain measures to increase the size of the male member, promote potency, delay ejaculation, and remove a disagreeable smell. One of the prescriptions for enlarging the penis (252) says that particular pills should be soaked in the patient's own urine before daubing his penis with the substance.

Noteworthy medicinal substances mentioned are *kuhelā* (245) and *mlecchajavānikā* (259).⁶⁸⁶

*The Vaidyarahasya*⁶⁸⁷

The treatise consists of about 1,900 verses, arranged in more than seventy chapters. The order of the diseases is broadly the same as in the *Mādhavanidāna*, apart from a number of additions: *jvarātisāra*, *raktātisāra*, *plīhan*, *yakṛdroga*, *kārśya*, *agnidagdha*, *snāyuka*, *phiraṅgavāta*, *rasāyana*, and *vājīkaraṇa*; *bradhma* (*aṇḍavṛddhi* 18), *somaroga* (*strīroga* 18 and 23) and *śītalājvara* (*masūrikā* 9) are also mentioned without a separate chapter being devoted to these disorders. Some contraceptive and abortifacient formulae are found in the chapter on disorders during pregnancy (*garbhavatīcikitsā* 31–35). Prodromes, symptoms, etc., are rarely enumerated; exceptions are e.g., *aupatyakajvara* (*jvara* 145–146), *āma*- and *pākvātisāra* (*atisāra* 4–5). Usually, mention is made of what is wholesome (*pathya*) and unwholesome (*apathya*) in a particular disease.

Vidyāpati's therapeutics, which he calls *saṃpradāyacikitsita* (*jvara* 230), is of a mixed type, which employs both *āyurvedic* prescriptions and *rasayogas*; the latter are not dealt with separately but they occur scattered among the former. The *āyurvedic* preparations are for the greater part of the traditional types (*kvātha*, *cūrṇa*, *ghṛta*, *taila*, etc.), but a number of *pākas* is also described.⁶⁸⁸ Religious and magical elements are infrequent.⁶⁸⁹ Opium, Cannabis, *akāraṅkarabha*, *jayapāla*, and *mājūphala* are repeatedly

prescribed.

Sources mentioned are: *Bhāvaprakāśa* (kuṣṭha 8 and 21; gaṇḍamālā 17), Caraka (vātavyādhi 91), Gopāla⁶⁹⁰ (phiraṅga 10), Lolimbarāja⁶⁹¹ (agnimāndya 19), Śārngadhara (vātavyādhi 91), Trimalla (aṇḍavṛddhi 20), and *Yogataraṅgiṇī* (ślīpada 5; gaṇḍamālā 18).

Vidyāpati's *Vaidyarahasya* is quoted in the *Bṛhadrasarājasundara* and *Rasayogasāgara*. A *Vaidyarahasya* was one of the major sources of the *Amṛtasāgara*.

Interesting names of disorders are: aupatyakajvara (jvara 145–146),⁶⁹² dohadodbhūtanirnāmikā (bālaroga 24), durjaladoṣaja jvara (jvara 187cd–188ab), janmaśūla (śūla 16), jaratpitta (śūla 36), kūlaka (vātavyādhi 90), nāsābhariga (phiraṅga 38), nirnāmā (bāhyā and ābhyantaragā; bālaroga 24), nirnāmikā (bālaroga 22), śītalājanita puṣpa (netraroga 68), śūnyatā (kuṣṭha 48), vṛaṇagranthi (i.e., keloid; agnidagdha 8), and vārāhadaśanāhvaya (kṣudraroga 16).⁶⁹³

Noteworthy names of vegetable substances are: alābukhārā (jvara 210), the gum of the babbūla tree (prameha 17), candrasūra (hikkā 7; vātavyādhi 52), dārucīnī (prameha 12), gaṇḍagopālikā (gaṇḍamālā 5), hauhavera (strīroga 20), kahelī (strīroga 19), kuhū (prameha 23), mālī (garbhavatī 41), mihandikā (vṛaṇaśoṭha 40), pikākhyā (garbhavatī 43),⁶⁹⁴ revaccīnī (prameha 19), śikharī (kuṣṭha 52),⁶⁹⁵ and śvetasnuhī (agnimāndya 49).

Other medicinal substances of interest are the flesh of an animal called cikhurī (aṇḍavṛddhi 20),⁶⁹⁶ gurjaradeśajātayavakṣāra (bālaroga 22), gajavelī (a kind of iron; netraroga 55), mleṣakṣāra (bhagandara 11), muradāśaṅkha (phiraṅga 5; kṣudraroga 7; śīroroga 41), mūrḍaśaṅkhaka (vṛaṇaśoṭha 38), nṛmadhusamuttha (bhagna 9), sābuna (śīroroga 40),⁶⁹⁷ and soraka (phiraṅga 5).

Some of the recipes contain vernacular names of medicinal substances such as āvarā (śīroroga 42; mukharoga 15), chārū (śīroroga 41), kaccīlākha (mukharoga 15), kāviyāsindūra (śīroroga 40), khaira (śīroroga 42), līlavārī (śīroroga 42), nīlāthothā (śīroroga 42; mukharoga 15), and phitkarī (mukharoga 15).

The author

Upādhyāya⁶⁹⁸ or Miśra⁶⁹⁹ Vidyāpati⁷⁰⁰ was the son of Vaṇṣīdhara, who wrote the *Vaidyakutūhala* and *Vaidyamanotsava*. He was a brāhmaṇa hailing from Mithilā,⁷⁰¹ who adorned the court of Śivasiṃha and other kings.⁷⁰² The name of his teacher may have been Candrabhānu Mahādeva.⁷⁰³ Vidyāpati was a devotee of Arjuna.⁷⁰⁴

Date

The *Vaidyarahasya* was written in A.D. 1697/98.⁷⁰⁵ The date of composition of the *Cikitsāñjana* is unknown, but it may be earlier than the *Vaidyarahasya*.

Vinayamerugaṇi

Vinayamerugaṇi, a Jain monk, pupil of Hemadharma of the Kharataragaccha, compiled a collection of recipes called *Vidvanmukhamāṇḍanasārasaṃgraha*.⁷⁰⁶

One of his pupils, Mānakavi or Mānamuni, wrote two medical treatises in Rājasthānī, called respectively *Kavivinoda* and *Kavipramoda*. Vinayameru lived in the last quarter of the seventeenth century.⁷⁰⁷

Vīreśvara

Vīreśvara, son of Devīdāsa, grandson of Dvivedaraghuvaiṇśa, pupil of Vihārīlāmiśra (a gauḍa, who resided in Aṅgalāpura), wrote the *Rogārogaṇḍa*⁷⁰⁸ in Iṣṭakāpatha in A.D. 1668/69.

It is an interesting work of a dialectical nature, which enters into a discussion of the views of ancient scholars of medicine. Vagbhaṭa's *Aṣṭāṅgaḥṛdayasaṃhitā* was Vīreśvara's chief authority and is often quoted together with two commentators on that treatise, Aruṇadatta and Hemādri. Other sources quoted are Caraka, Mādhava and Suśruta.⁷⁰⁹

Yaśaḥcandra

Yaśaḥcandra wrote the *Sarvasāra* in 1688/89.⁷¹⁰

Chapter 3

Eighteenth-century authors and works

Ānandavarman

Ānandavarman, author of the *Sārakaumudī*, is assigned to the middle of the eighteenth century.¹

Anaṅga Kavirāja

Anaṅga Kavirāja, who enjoyed the patronage of the Ahom monarch Lakṣmīsiṃha (A.D. 1769–1780), composed a voluminous work called *Vaidyakaḷpataru*.²

Ananta

Ananta, of Dadhīci family, son of Keśavarāya, composed at the behest of Mahārāja Pratāpasīṃha of Jaypur³ (A.D. 1778–1803) in 1792/93 the *Pratāpakalpadruma*, also called *Anantaparakāśa*, a work in twenty-four chapters.⁴

Sources referred to by Ananta are:⁵ *Ānandamālā*, *Bhāgavata*, *Bhāvaprakāśa*, *Ca-raka*, *Cikitsāmr̥tasāgara*, *Cikitsāsara*, *Dāmodara*, *Gāruḍīsaṃhitā*,⁶ *Hārīta*, *Hitopadeśa*, *Jvaratimirabhāskara*, *Kutūhala*, *Lakṣmaṇotsava*, *Ratnabhūṣaṇa*,⁷ *Ṛtucaryā*, *Siddhānta-śiromaṇi*,⁸ *Śīrājagrantha*(?),⁹ *Suśruta*, *Ṭoḍarānanda*, *Vāgbhaṭa*, *Vaidyakaśāroddhāra*, *Vaidyapaddhati*, *Vaidyarahasya*, *Vaidyaratna*, *Vaidyasaṃjīvanī*,¹⁰ *Vaidyasāra*, *Vaidya-vinoda*, *Vidvajjanarājījana*,¹¹ and *Vṛ̇ṇḍa*.¹²

Bālarāma

Bālarāma, author of the *Ātaṅkatimirabhāskara*, is assigned to the eighteenth century.¹³

Raghunāthajī Indrajī, the author of the *Nighaṇṭusaṃgraha*, borrowed the description of tea from the *Ātaṅkatimirabhāskara*.¹⁴

Basava

Basava was the author of the *Śivatattvaratnākara*.

The *Śivatattvaratnākara*¹⁵ is a large encyclopaedia,¹⁶ which contains the following subjects of medical interest:¹⁷ āyurveda as an upaveda of the *Ṛgveda* (I.2.15);¹⁸ a definition of the term āyurveda (I.2.16cd-17ab); measures of length (II.1.6cd-11);¹⁹ diseases caused by sins committed in previous lives (II.3); grahas (III.1.28-47);²⁰

kāla-jñāna and aṣṭas (V.1.62–88ab); dreams (V.3);²¹ omina (śakuna; V.8);²² definitions of a good cook (sūda), bhiṣaj, and vaidya (V.15.91cd–99ab);²³ vṛkṣāyurveda (VI.10 and 11);²⁴ kāmāśāstra (VI.12 and 13.1–127);²⁵ inunction (abhyariga) and anointing (vilepana) of a king's body (VI.14.22–88);²⁶ the art of perfumery (gandhayukti; VI.15);²⁷ precious stones (VI.17);²⁸ prepared foods (VI.18 and 19);²⁹ medicine (VI.21);³⁰ properties of articles of food and some other substances, together with related subjects (VI.22.1–38ab); the formulae of eight important rasayogas (VI.22.47–98); alchemy and iatrochemistry (VI.22.99–130ab; VI.23, 24 and 25); toxicology (VI.26–27);³¹ indrajāla (VII.2: quoted from the *Haramekhalikātantra*);³² characteristics of the female (VII.9) and the male (VII.10) body and their meaning;³³ elephant-lore (VII.11);³⁴ aśvaśāstra and some other subjects related to veterinary science (VII.12 and 13).³⁵

Special features

Interesting subjects are: some names of vegetables: śakaṭa, mahābāṣpa, goṇī, and gandhalakṣmī (VI.18.121); some prepared dishes: doṣaka (VI.19.16cd–17ab), iḍḍalikā (VI.19.17cd–21ab), and varṣelaka (VI.19.27cd–33ab); a description of the descent of āyurveda to the human world (VI.21.4–5);³⁶ definitions of the eight limbs of āyurveda: kāyatantra, bālatantra, grahatantra, śālākyaatantra, śalyatantra, agadatantra, rasāyanatantra, and vṛṣatantra (VI.21.8–14); the three doṣas (VI.21.23–39, 46–47ab, 54, 97–108ab);³⁷ the digestive fire (VI.21.25cd–26ab, 40–41);³⁸ the amount of time required for the digestion of various substances (VI.21.42–45);³⁹ the six tastes (VI.21.47cd–53);⁴⁰ the eightfold examination of a patient (VI.21.55); the examination of the pulse (VI.21.56–96);⁴¹ fevers (VI.21.110cd–137ab);⁴² groups of drugs (VI.21.137cd–178);⁴³ types of country (deśa) and soil (bhūmi) (VI.21.186cd–197ab);⁴⁴ the definition of a rasavaidya (VI.23.56–57); lists of plants employed in the various processes (saṃskāra) to which mercury is subjected (VI.24.2–33); the eighteen saṃskāras of mercury (VI.24.50–182ab);⁴⁵ descriptions of the human constitutions (sāra and prakṛti) (VII.10.159–164 and 170–173).⁴⁶

The chapter on perfumery (gandhayukti; VI.15) mentions five basic processes (saṃskāra): mardana, svedana, lepana, dhūpana, and saṃvāsana (15.6cd–9).

The chapter on precious and semi-precious stones (VI.17) describes five mahāratnas: diamond (vajra), pearl (muktāphala), ruby (māṇikya), sapphire (nīla), and emerald (marakata), and five uparatnas: puṣpārāga, vaiḍūrya, gomeda, sphāṭika, and pravāla.

Some subjects dealt with in the chapters devoted to alchemy (VI.22–25) are: a list of eight mahārasa(yoga)s, called sarveśvara, pūrṇacandrodaya, rājamarṅgāṅka, mālinīvasanta, vasantakusumākara, trailokyacintāmaṇi, mahābhūpati, and lakṣmīvilāsa (22.47–48); the formulae of these rasas (22.49–98);⁴⁷ the naisargikamalās of mercury: pārthiva, āpya, āgneya, ānīla, nābhāsa, gajacarmākhyā, puṇḍarīka, visarpaka, hāridra, raktacarmākhyā, nārāga, raktabinduka, asaḥyāgni, and maṇḍūka (VI.23.34–35); the seven kañcukas: kālīkā, mālinī, kapotī, raktikā, (ś)alomī, girijā, and piṅgalī (VI.23.36–37ab); the three yaugikamalās: viṣa, nāga, and vaṅga (VI.23.37cd); the preparation of some sindūras (22.107cd–112); the description of some bhasmans

(22.113–118ab); measures (22.118cd–126ab);⁴⁸ the storage life (vīryāvasthitikāla) of various pharmaceutical preparations (22.126cd–128ab); dosages (22.128cd–130); the five avasthās of mercury (23.32–33); the doṣas of mercury (23.34–44); the eight mahārasas: bhūnāga, ghana (= abhṛaka), vaikrānta, vimalā, tāpya, tutthaka, kharparī, and rājāvarta (23.58);⁴⁹ the eight uparasas: gandha, karīkuṣṭha, kāsīsa, (manah)śilā, kārīkṣī, varāṭikā, gairika, and tālaka (23.59cd–60ab);⁵⁰ a series of six sādharma-
 ṇarasas: girisindūra, podāraśṛṅgi,⁵¹ gaurīśilā (= gaurīpāśāṇa), añjana, kampilla, and capala (23.60cd–61ab);⁵² a series of four śaktirasas: hīṅgula, sasyaka, śilājī, and agnījāraka (23.61cd–62ab);⁵³ a series of five uparatnas; sphāṭika is of three types: sūryakānta, candrakānta, tārakānta, to which some add lohakānta as a fourth type (23.63cd–64ab).⁵⁴

The divyauśadhis enumerated are: atasīvallī, bhagavallikā, bhūtakeśī, bhūtumbī, bilvinī, brahmānī, camarikā, caṇḍālī, devadālikā, gāndharvī, garuḍavallikā, gomā-
 rī, gośṛṅgi, īśvarī, jyotirlatā, kākinī, karīraka, karīravallārī, kṛṣṇavallārī, kṣatrinī, kūrmatatā, laṣunavallārī, locanalatā, mādhavī, mahāmāṣa, mahauśadhī, maṇḍūkī, mūlakandaka, munivallikā, nimbā vallī, padminī, pītavallī, raktalatā, rohiṇī, rudantī, tāmravallikā, tilakanda, triśūlinī, tumbinī, vīravallī, and vyāghrapādī (24.2–7ab).

The very potent (mahābala) vanaśadhis are: alambusā, aparājītā, ardha-candra, candrikā, cintyā,⁵⁵ citrapatṛā, durgandhā, hemapuṣpī, jahāhemāgama, jalakumbhī, jalamūlaka, jalapippalī, jālinī, jalotpalā, kākamācī, kapotī, karṇisphoṭī, kṣīrinī, māṇsī, maṇḍūkī, meghānādī, musalī, nandini, pāśāṇī, patākī, rasā,⁵⁶ rohiṇī, samaṅgā, sārivā, śikhā, śikhipādā, śītagandhinī, sthalaprasārīṇī, śukanāsikā, tulasī, tuṣāmbu, uttamā, vanakuṣmāṇḍavallī, vāyasī, veṇukā, and vṛścikālī (24.7cd–13ab).⁵⁷

The list of niyāmaka plants (24.15–22) reproduces, more or less, *Rasendracūḍa-
 maṇi* 8.1–8ab; the list of bhasmakara plants (24.23–33) has also been borrowed, with a number of variants, from the *Rasendracūḍa maṇi* (8.9cd–20).

The eighteen saṃskāras listed (24.50–54) and described (24.55–182ab) are: svedana, mardana, mūrchā, utthāna, pātana, rodhana, niyāma, dīpana, anuvāsana, cāraṇa, jāraṇa, garbhadrutī, bāhyadrutī, rāga, sāraṇa, anusāraṇa, krāmaṇa, and vedha. Two types of mukha are mentioned: divya and āsura (24.112cd–113). Jāraṇā is of two varieties: bāla- and baddhajāraṇā (24.119). Pratisāraṇa, not listed as a distinct saṃskāra, is described (24.161–164). Five types of vedha are distinguished: lepa-, kṣepa-, kunta-, dhūma-, and śabdavedha (24.168–174ab).

The yantras described are: dolā-, adhaḥpātana-, tiryakpātana-, kacchapa-, ūrdhva-
 pātana-, āntarālika-, tāpikā-, pratigarbha-, dvipālikā-, puṭa-, vidyādhara-, ḍamaruka-, nābhi-, garta-, ḍeriki-, somānala-, and nālikāyantra (25.17cd–59).⁵⁸ Yantras mentioned only are: vadavānala-, dhūpa-, kanduka-, khecara-, sthālikā-, tulā-, lavaṇa-, iṣṭikā-, and koṣṭhayantra (25.61–62).⁵⁹ The mūṣās are referred to (25.63–68);⁶⁰ the usual types of puṭa are characterized (25.69–82ab).⁶¹

Some sources⁶² mentioned at the end of kallola six are: the Aśvins, Dattila,⁶³ *Dha-
 nvantarimata*, *Gaurīmata*, *Gītaratnākara*,⁶⁴ *Nalamata*,⁶⁵ Kohalaka,⁶⁶ *Mayamata*,⁶⁷ *Pra-
 yogasāra*,⁶⁸ *Rasaḥṛdaya*, *Rasaratnākara*, Śāriṅgadhara, *Utpalaparimāla*,⁶⁹ *Viśvakama-
 mata*,⁷⁰ *Vihagendrasaṃhitā*,⁷¹ and *Yogaratnāvalī*.

Some sources referred to at the end of kallola seven are: *Aṃṛtānanda*,⁷²

Haramekhaliḱātantra,⁷³ *Kautukacintāmaṇi*, *Mānasollāsa*, *Merutantra*, *Nakula*,⁷⁴ *Nala*, *Pālakāpya*, *Śālihotra*, *Vāgbhaṭa*, and *Vidyānātha*.⁷⁵

The author

Basava Bhūpāla⁷⁶ (1684–1710)⁷⁷ was the last ruler of the Kelaḍi kingdom, which flourished from A.D. 1499 to 1763 in the area corresponding to the coast of Karṇāṭaka from Goa in the north to Cannanore in the south.⁷⁸ Kelaḍi was also known as Ikkēri, and its rulers, who professed Viraśaivism,⁷⁹ were great patrons of literature and architecture.⁸⁰

Basava Bhūpāla also wrote the *Subhāṣitasuradruma* (in Sanskrit),⁸¹ the *Sūktisudhākara* (in a mixture of Sanskrit and Kannaḍa), and a commentary (in Sanskrit) on the *Siddhāntaśikhamaṇi*.⁸²

The genealogy of Basava Bhūpāla's family forms part of the *Śivatattvaratnākara*.⁸³ He was the son of Somaśekhara and Cannāmbikā or Cennāmbikā,⁸⁴ a pupil of Cannavīrakara, and a patron of Cokkanātha, author of the *Kāntimatipariṇaya*.⁸⁵

Date

The *Śivatattvaratnākara* was completed in 1709.⁸⁶

Cainarūpa

Cainarūpa, a Jain author, who probably lived in Bīkāner, wrote in 1778/79 a *Pathyāpathyastabaka*.⁸⁷

Cakrapāṇidāsa

Cakrapāṇidāsa, son of Parāṅkuśa, completed his *Abhinavacintāmaṇi* in 1799.⁸⁸

Contents

This treatise is arranged in sixty-six chapters (kīraṇa). Chapters one to four deal with māna and paribhāṣā, rasādiśuddhi, kalādidvādaśatattva, and nāḍyāditrayodaśatattva. Chapters five to sixty-three are concerned with the treatment of diseases. The last three chapters are about rasāyana, vājīkaraṇa, and vamanādi, along with ṛtucaryā. The arrangement of the diseases generally agrees with the order adopted in the *Mādhavanidāna*. The recipes begin with kvāthas, cūrṇas, etc., followed by rasayogas, and end with tailas and gṛhṭas. The treatise is a compilation derived from various sources, but the original texts have been modified.

Special features

Minor deviations from the arrangement of the diseases in the *Mādhavanidāna* are: a separate chapter on kāmālā and haḷīmaka; separate chapters on śvāsa and hikkā; vraṇaśoṭha, śārīravraṇa, sadyovraṇa, bhagna and nāḍīvraṇa are discussed in one chapter, as well as visarpa and visphoṭa; pradara, yonivyāpad, mūḍhagarbha and sūtikāroga are

dealt with collectively in a chapter on strīroga. Special emphasis is laid on astrological and religious aspects of therapy. A new disorder described is amlapittajvara.⁸⁹

Diler Jang

Diler Jang was the author of the *Dinacaryāpaddhati*.⁹⁰

Dīpacandra

Dīpacandra, with the title of Vācaka, was the author of the *Laṅghanapathyanirṇaya*,⁹¹ a work on fasting and diet, especially in the treatment of fevers. The treatise consists of a laṅghanaprakaraṇa on fasting in 215 and a pathyaprakaraṇa on wholesome articles of diet in 116 stanzas.⁹²

The following sources are quoted: *Amṛtasāgara*,⁹³ *Ānandamālā* (by Ānandabhārati Yāfindra), *Bhāvaprakāśa*, Bhela, *Bhīṣakcitracittotsava*,⁹⁴ *Cakradatta*, Caraka, *Cikitsā-mṛta* (sāgara),⁹⁵ *Cikitsāratnabhūṣaṇa*,⁹⁶ Dāmodara, *Gāruḍīsaṃhitā*, Hārīta, *Hitopadeśa*,⁹⁷ *Jvaratimirabhāskara* (by Cāmuṇḍa), *Kāla jñāna*, Kṣemakutūhala, *Lakṣmaṇotsava*, *Mādhavanidāna*, *Siddhāntasīromaṇi*,⁹⁸ *Sūpakāragrantha*, Suśeṇa, Suśruta, *Ṭoḍarānanda*, *Vāgbhāta*, *Vaidyakaśaṃjīvana*,⁹⁹ *Vaidyakaśārasaṃgraha*,¹⁰⁰ *Vaidyasarvasva*,¹⁰¹ *Vaidyavinoda*,¹⁰² Vaṅgasena, *Vṛddhasuśruta*, *Vṛddhaviṇḍa*, and *Vṛṇḍa*.¹⁰³

The author and his date

No particulars are known about the author, except his being a Jaina, as appears from his title Vācaka. He composed his work in 1735/36 under the reign of Jaiśiṃha II of Jaypur.¹⁰⁴ He was a pupil of Dayātilakopādhyāya¹⁰⁵ and belonged to the tradition of Jinadattasūri.¹⁰⁶ Other works of the same author are a Hindī commentary on Kalyāṇadāsa's *Bālatantra* and an unspecified *Vaidyakagrantha*.¹⁰⁷

Ekojī

Ekojī, one of the Maratha kings of Tanjore, is credited with a work called *Āyurveda*.¹⁰⁸

Gopālādāsa Vaidya

Gopālādāsa Vaidya, son of Siddheśvara and grandson of Rāmarāma of Dvārāndhra, was the author of the *Yogāmṛta*, written in 1771/72. This work is provided with an auto-commentary called *Subodhinī*.¹⁰⁹

Govindadāsa

Govindadāsa was the author of the *Bhaiṣajyaratnāvalī*,¹¹⁰ a very large treatise, mainly in verse, on therapy and a number of other subjects. The 12,360 verses of the work are arranged in 106 chapters (prakaraṇa).

Contents

Chapter one describes the descent (avatāra) of āyurveda to the human world in its own way, thereby mentioning Caraka, Suśruta and Vāgbhaṭa as the three great masters of the medical science. Chapter two is about the purification (śodhana) and killing (māraṇa) of a series of substances used for iatrochemical purposes.¹¹¹ Chapter three (miśravargaprakaraṇa) is concerned with various general subjects connected with medicine. Chapter four (paribhāṣāprakaraṇa) is about weights and measures (1–14), groups of medicinal substances (15–44), some medicinal preparations (45–56), substitutes for rare drugs (57–100), and subjects related to the preparation of drugs (101–130).¹¹²

Chapters five to seventy-two are concerned with the treatment of diseases, for the greater part arranged in agreement with the *Mādhavanidāna*.¹¹³ Verses on nidāna are absent. The rasauśadhas are preceded by āyurvedic prescriptions. Chapter seventy-three deals with rasāyana, seventy-four with vājīkaraṇa, seventy-five with the suppression of ejaculation (vīryastambha).

Chapters 76–106 describe diseases, together with their treatment, which are absent from the *Mādhavanidāna*. Three pariśiṣṭa chapters are about pittaroga, kapharoga, and some especially efficient formulae (anubhūṭayoga), which are said to derive from Rājeśvaraśāstrin.¹¹⁴

Sources are not mentioned in the body of the text.¹¹⁵

The *Bhaiṣajyaratnāvalī* is quoted in Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, Gulrājśarmamiśra's *Viśikhānu-praveśavijñāna*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpakvarasānirmāpavijñāna*, Jīvānandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha*, Nirañjanaprasāda Gupta's *Pāradasaṃhitā*, the *Rasadhātuprakāśa*, and Yādavajī Trikamajī Ācārya's *Rasāmṛta* and *Siddhayogasamgraha*. It was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*, the *Bheṣajasaṃhitā*, Devasiṃha Viṭṭhal's *Brhadāsavārīṣṭasaṃgraha*, Viśvanātha Dvivedī's *Rasendrasambhava*, and the *Rasoddhāratantra*.

Special features

In contrast with the *Mādhavanidāna*, two separate chapters are devoted to jvarātisāra (6) and plīhayakṛdroga (41). The treatment of one series of thirteen saṃnipāta fevers is described: śītāṅga, tandrika, pralāpaka, raktaṣṭhīvin, bhugnanetra, abhinyāsa, jihvaka, sandhika, antaka, rugdāha, cittabhrama, kaṇṇika, and kaṇṭhakubja (5.277–324). An unusual fever is nāsikājvara (5.1410–1413).¹¹⁶ The chapter on atisāra mentions the treatment of śothātisāra (7.77–78). The chapter on vātavyādhi has two different lists of gandhadravys to be used in the preparation of fragrant oils (26.302 and 303–306); the same chapter describes the purification (śuddhi) of aromatic substances and refers to techniques of gandhaśāstra (443–469); it also deals with tests giving answers about the genuineness or adulteration of fragrant substances (470–507).¹¹⁷ The chapter on maśurikā refers to the śītalāstotra (59.44) and mentions some other deities to be invoked in this disease (59.42–43). The chapter on diseases in pregnant

women describes the ubhayatriṇṣaka and ubhayapañcadaśa yantras (68.64–66); it also refers to the rākṣasī Jambhālā, who procures an easy delivery (68.67). Rāvaṇa's *Kumāratantra* is quoted in the chapter on children's diseases (71.182–193); the same chapter mentions the disorders called āhiṇḍikā (71.13 and 16)¹¹⁸ and paścādrūj(a) (71.81 and 82). Each chapter closes with the enumeration of what is beneficial (pathya) and harmful (apathya) in a particular disease. The third pariśiṣṭa chapter mentions disorders called snāyudaurbalya and svapnameha.¹¹⁹

The most noteworthy feature of the *Bhaiṣajyaratnāvalī* consists of the description of a long series of diseases, together with their treatment,¹²⁰ which are for the greater part rare in other āyurvedic treatises and betray the influence of western medicine.¹²¹

These diseases, added in a viśiṣṭarogādhikāra (chapters 76–106) are: āmāśayaroga (76),¹²² smaromāda (77),¹²³ gadodvega, also called apadārtharoga (78),¹²⁴ tattvonmāda, also called brahmamoha (79),¹²⁵ acalavāta (80),¹²⁶ tāṇḍavaroga (81),¹²⁷ snāyuroga, also called snāyusūla (82),¹²⁸ skhālitya (83),¹²⁹ khañjanikā (84),¹³⁰ urastoya (85),¹³¹ bahumūtra (86),¹³² somaroga, mūtrāṭisāra,¹³³ and madhumeha¹³⁴ (87), śukrameha (88),¹³⁵ aupasargikameha, also called pūyameha, vṛṇameha, and āgantumeha (89),¹³⁶ ojomeha (90),¹³⁷ lasīkameha (91),¹³⁸ dhvajabhāṅga, also called klaibya (92),¹³⁹ vṛkkaroga (93),¹⁴⁰ klomaroga (94),¹⁴¹ phiraṅgaroga, also called gandharoga (95),¹⁴² snāyukaroga (96),¹⁴³ pāradaṅvikāra (97),¹⁴⁴ śīrṣāmburoga (98),¹⁴⁵ mastiṣkavepana, also called śīrṣavepana and -vepathu (99),¹⁴⁶ mastiṣkacaya, also called mastiṣkavṛddhi, and mastiṣkāpacaya, also called mastiṣkahrāsa (100),¹⁴⁷ aṃśughāta (102),¹⁴⁸ yośāpatantraka, also called yośāpasmāra (103),¹⁴⁹ yonikaṇḍū (104),¹⁵⁰ aṇḍādhāraroga (105),¹⁵¹ and apamumūṛṣu (106).¹⁵²

Chapters 76–106 contain a number of compound medicines, in particular rasayoga, thought to be specifics against diseases mentioned in these chapters.¹⁵³ Yogas described in preceding chapters (five to seventy-five) are repeatedly referred to.

Religious and magical practices said to cure particular diseases are also mentioned.¹⁵⁴

The materia medica consists for the greater part of the usual āyurvedic and iatrochemical substances.

Noteworthy names of medicinal plants and plant products are:¹⁵⁵ ācu (54.353),¹⁵⁶ ākarakarabha (75.15), amlaṇṇī,¹⁵⁷ āsāraṇa (5.672),¹⁵⁸ asraghnī,¹⁵⁹ asthikarkata (5.430),¹⁶⁰ bakapuṣpa (32.39),¹⁶¹ bakapuṣpikā,¹⁶² bhadrotkata (8.392; 69.21),¹⁶³ bheki,¹⁶⁴ bhūkūṣmāṇḍa (74.59),¹⁶⁵ bhūmikūṣmāṇḍa, ¹⁶⁶ bṛhadbhaṇḍī (pariśiṣṭa 2.30),¹⁶⁷ camarīphala (45.48),¹⁶⁸ candraprabhā,¹⁶⁹ candraśūra (101.5), copacīnī (95.24), daṇḍinī,¹⁷⁰ dārusitā (16.108),¹⁷¹ dhanīyaka (37.211),¹⁷² dhavalāṅkathā (41.138),¹⁷³ gandhālikā,¹⁷⁴ gandhamātrkā (26.305; 66.33),¹⁷⁵ gandhapattraka (26.508),¹⁷⁶ ghaṇṭakarna(ka) (56.58, 72, 89),¹⁷⁷ girikanyā,¹⁷⁸ guñjākinī (5.672),¹⁷⁹ hastiśuṇḍī (5.628; 82.20), hastiśuṇḍikā (5.658),¹⁸⁰ hemāmbhodhara (30.216), indrasūra (10.221; 181.45.48),¹⁸² irima (61.104),¹⁸³ jalakarnā (14.120),¹⁸⁴ jāmātar (56.79),¹⁸⁵ jayitī (8.179),¹⁸⁶ kapihastaka,¹⁸⁷ kapotavaktraka (36.13),¹⁸⁸ karṇamoraṭa (5.1416),¹⁸⁹ kāṣṭhamāṛjārikā,¹⁹⁰ kāsunda (54.352),¹⁹¹ keśākhyā (5.575),¹⁹² kinkinī (65.152 and 154),¹⁹³ kūlikā (72.50),¹⁹⁴ kundakhoṭī (8.217),¹⁹⁵ mahādreka (37.210),¹⁹⁶ maurvī,¹⁹⁷ mocaka (74.230),¹⁹⁸ nāgaparnī,¹⁹⁹ padmāṭa (54.210; 61.106),²⁰⁰ pītamūlī (98.9 and 11),²⁰¹

rājahemaka (65.154),²⁰² rājasvarṇaka,²⁰³ raktapuṣpa,²⁰⁴ rocana,²⁰⁵ śālīṇca (5.576; 10.306), śālīṇcī,²⁰⁶ śālmālmocaka,²⁰⁷ saurī (26.503),²⁰⁸ sudhāmūlī (15.194),²⁰⁹ svarṇadhustūra (5.651),²¹⁰ śvetadhūnaka,²¹¹ tīkṣṇapaṇa (5.650),²¹² tripurabhaṇḍikā or -bhaṇṭikā (5.671),²¹³ ṭṛṇapaṇa (54.210),²¹⁴ ulla (56.59),²¹⁵ vaivasvatadruma (54.364),²¹⁶ vakama,²¹⁷ and vanasaṛṣapa (5.670).²¹⁸

Inorganic substances mentioned are rasakarṇpūra (95.10–11) and soraka (89.22).

Distillation is clearly described in the verses on the preparation of mṛtasamjīvanī surā (5.1261–1272; 74.372–386).²¹⁹ Yantras used are the bakayantra (parīṣiṣṭa 3.19), kacchapayantra (9.182), mocikā- and mayūrākhyayantra (5.1269; 74.376), and the ga-jakumbha (74.378).²²⁰

The third parīṣiṣṭa chapter, containing recipes deriving from Rājeśvaraśāstrin, mentions kattīraka (51), khatamī (22), sālibāhvā (50), sāmudranārikela (42), ṭṛṇakānta (40), unnābaka (23), and vanasikā (22). It refers to Yūnānī medicine (yāvana vaidyaka; 48), and gives the formula of a Yūnānī compound medicine, called yāvanaratneśvara or jawāhīr mohrā (40–48).

The author

Govindadāsa²²¹ was the son of Candracūḍa and Ambikā.²²² He may have been a Bengal physician since the MSS of the *Bhaiṣajyaratnāvalī* are found exclusively in Bengal.²²³

Date

The work is usually assigned to the eighteenth century.²²⁴ It has to be taken into account that chapters two and four, and in particular chapters 76–106, do not belong to the original text, but were probably added by Brahmaśaṅkara Mīśra in the nineteenth century.

Guṇavilāsa

Guṇavilāsa, a Jain monk of the Kharataragaccha, wrote the *Guṇaratnaprakāśikā* in A.D. 1715/16.²²⁵

Haṁsarāja Pippalaka

Haṁsarāja Pippalaka, a Jain, was the author of the *Mūtralakṣaṇa*, a work dating from the eighteenth century of the Vikrama era, i.e., about A.D. 1650–1750.²²⁶

Jogīdāsa

Jogīdāsa, known as Dāsakavi, wrote the *Vaidyakasāra*, a therapeutic treatise, written in Rājasthānī on the request of Jorāvarasiṃha, eldest son of Mahārāja Sujānasiṃha of Bīkāner (1700–1735).

The author was a Śvetāmbara Jain monk, son of Joṣīrāya. He completed his treatise in A.D. 1705/06.²²⁷

Kāpālīka

Kāpālīka wrote a monograph on eye diseases, the *Kāpālīkagrantha* or *Netraroganidāna*,²²⁸ under the reign of Shāhajī, one of the kings of Tanjore.²²⁹

Kāśīnātha

Kāśīnātha was the author of the *Laighanapathyanirṇaya*.²³⁰

Keśavarāma

Keśavarāma or Vyāsakeśavarāma was the author of the *Laghunighaṇṭa* or *-nighaṇṭu*, also called *Auśadha-*, *Auśadhi-* and *Oṣadhināmamālā*.²³¹

Contents

The treatise consists of 237 verses which, the first and last verse excepted, enumerate the names and properties of a series of drugs of vegetable, animal and mineral origin.²³² The Sanskrit synonyms are preceded by their Gujarātī equivalents. The absence of a large number of important medicinal substances, e.g., aśoka, balā, candana, dantī, kuṭaja, mūrvā, lodhra, śigru, and yaṣṭimadhu, cannot be explained.²³³ In general, it remains completely obscure on which grounds the author decided to include or omit particular items of the Indian materia medica.

Sources are not indicated but the resemblance of many of the strings of synonyms with those found in the *Dhanvantarīyanighaṇṭu*²³⁴ indicate the author's indebtedness to that work and his lack of originality. The description of the medicinal qualities does, however, not tally with the *Dhanvantarīyanighaṇṭu*.

Special features

Although yavānī itself is not described, the author mentions pārasīkayavānī (67cd–68ab) and sugandhakarabha (68cd; called khurāsānī yavānī in Sanskrit) as two distinct plants.²³⁵ Three types of punarnavā are referred to (172–173ab).²³⁶ Opium and *Cannabis* are absent.

The author

At the end of the work the author mentions that his name is Vyāsakeśavarāma, pupil of Dhanvantari. He apparently belonged to Gujarāt because he included the Gujarātī names of the drugs described.

Date

The author is assigned to the end of the eighteenth century by the editors of the *Laghunighaṇṭa*.²³⁷

Lakṣmīcand

Lakṣmīcand, a Jain monk of the Kharataragaccha, pupil of Amaravijaya, wrote a *Vaidyakagrantha* in Hindī in the first half of the eighteenth century.²³⁸

Mahādevadeva

Mahādevadeva²³⁹ was the author of the *Hikmatprakāśa*²⁴⁰ and *Hikmatpradīpa*,²⁴¹ two treatises on Yūnānī medicine written in Sanskrit.

The *Hikmatprakāśa*²⁴² is a work of 1,910 verses arranged in three sections (khaṇḍa).

Contents²⁴³

Section one (seventy-nine verses) deals with the principles of Yūnānī medicine; it describes the four humours, their qualities and the grades of these qualities, the various powers (śakti) of drugs, the examination of the urine and that of the pulse. Section two (1,142 verses) is on medicinal substances, their names, varieties, properties and uses, both single and compound; substitutes are also mentioned in many cases. This section is divided into twenty-eight Vargas; the drugs have been grouped together according to the initial letter of their name and according to the order of the Arabic alphabet. Section three (689 verses) describes in twenty-one Vargas a number of medicinal preparations, also arranged in agreement with the Arabic alphabet.

The treatise is based on Persian medical works²⁴⁴ which explains that it abounds in Persian and Arabic medical terms. These terms are often explained, either in the text itself or in the *ṭikā* that accompanies it. The Sanskrit or Hindī equivalents of the Persian names of drugs are rather frequently recorded. The names of diseases are for the greater part those known from āyurvedic treatises.

The *Hikmatprakāśa* is quoted in Mauktika's *Vaidyamuktāvalī*.

Special features

Disorders of the lungs (phupphusa) are often referred to (e.g., 2.58, 99, 606, 616). Some diseases mentioned without any Sanskrit equivalent are aḥbal (2.974), khunāk (2.490; a disease of the throat),²⁴⁵ nākhūnā (2.100, 949 and 1066),²⁴⁶ ramad (2.153; an eye disease), and sojāka (3.666).²⁴⁷

The author

The author mentions his name and descent in one of the introductory verses: his name is Mahādevadeva,²⁴⁸ son of Bālakṛṣṇadeva, grandson of Nṛsiṃhadeva. The frequent allusions to mythology²⁴⁹ prove that he was a Hindu by faith.

Date

The treatise was, as indicated at the end, completed in A.D. 1773/74.²⁵⁰

*Mahāprakāśa*²⁵¹

Mallinātha

Mallinātha, son of Seṅganātha, was the author of the *Pathyāpathyanirūpaṇa*, composed in 1720,²⁵² and the *Vaidyakalpataru* or *Kalpataru*.²⁵³

Mukunda

Mukunda, son of the astrologer (gaṇaka) Raṅganātha of Vātsyāyana lineage, was the author of the *Upacārasāra*,²⁵⁴ a work on medicines and charms in five chapters: dravyajñaptinirūpaṇa (110 verses), rogavyaktinirūpaṇa (100 verses), kvāthādinirṇaya (210 verses), prakīrṇanirūpaṇa (64 verses), and rasādyupacāranirūpaṇa (232 verses).²⁵⁵

The *Upacārasāra* is quoted in Karandīkar's *Nidānadīpikā*.

The treatise was probably composed at the end of the eighteenth or beginning of the nineteenth century because Dinakara, an astronomer (jyautiṣa), son of Ananta and Gaṅgā, of Śaṇḍilyagotra, a resident of Golappa, wrote a commentary, called *Gūḍhaprakāśikā*, on it at Poona in 1818.²⁵⁶

Mukundadeva Mahārāja

Mukundadeva Mahārāja is the reputed author of the *Tailārṇava*, an elaborate treatise on medicinal oils probably composed in A.D. 1799.²⁵⁷

Nandakiśoramiśra

Nandakiśoramiśra, son of Veṇīprasāda, of Gautamagotra, composed his *Cikitsāsārasaṃgraha* in A.D. 1757/58, during the reign of Mādhava Rāo Scindia.²⁵⁸

Narasimhakavirāja

Narasimhakavirāja,²⁵⁹ son of Nilakaṇṭhabhaṭṭa,²⁶⁰ pupil of Rāmakṛṣṇabhaṭṭa, preceptor of Vaidyacintāmaṇi, was the author of (1) *Madhumatī*,²⁶¹ (2) *Prayogāmṛta*,²⁶² (3) *Ratnamālā*²⁶³ or *Rasaratnamālā*,²⁶⁴ (4) a commentary, called *Siddhāntacintāmaṇi*, on the *Mādhavanidāna*,²⁶⁵ (5) a commentary, called *Tattvaparakāśakaustubha*, on the *Carakasamhitā*,²⁶⁶ and (6) the revised version of the *Dravyaguṇarājavallabha*.²⁶⁷

The *Madhumatī*, a treatise in 8,672 verses,²⁶⁸ describes the therapy of diseases, which are arranged in agreement with the *Mādhavanidāna*; chapters on rasāyana and vājīkaraṇa are added. The last part of the work is about iatrochemistry; subjects dealt with are: rasaśodhana, rasamūrchana, rasabandha, rasamāraṇa, uparasādi, viṣādi, lauhasaṃskāra, lauhāmāraṇa, anupāna.²⁶⁹

Narasimhakavirāja must have lived during the eighteenth century, because his pupil, Vaidyacintāmaṇi, composed his *Prayogāmṛta* towards the end of that century.

Nārāyaṇa Bhiṣaj

Nārāyaṇa Bhiṣaj²⁷⁰ was the author of (1) *Karmaprakāśa*,²⁷¹ (2) *Vaidyacintāmaṇi*,²⁷² (3) *Vaidyāmṛta*,²⁷³ (4) *Vaidyavṛnda*,²⁷⁴ and (5) *Vātaghnatvādinirṇaya*.

Nārāyaṇadāsa Kavirāja

Nārāyaṇadāsa Kavirāja was the author of a number of medical works. His *Āyurvedaparibhāṣā*,²⁷⁵ *Cikitsāparibhāṣā*,²⁷⁶ *Paribhāṣā*,²⁷⁷ *Upaskāracikitsāṅgaparibhāṣā*,²⁷⁸ and *Vaidyaparibhāṣā*,²⁷⁹ recorded in the catalogues and histories of Indian medicine, may well refer to one and the same work. He is also credited with a *Nānauśadhapariccheda*,²⁸⁰ with a commentary, called *Siddhāntasaṃcaya*, on Śārṅgadharā's *Triṣaṭī*,²⁸¹ with the revised version of the *Dravyaguṇarājavallabha*, also called *Rājavallabhanighaṇṭu*,²⁸² and with the *Vyādhiśaṃkara*.²⁸³

Nidhi or Navanidhirāma

Nidhi or Navanidhirāma, son of Mahātman Sāhimalla, was the author of the *Yogasamuccaya*, composed in 1755/56.

Sources referred to in this work are: *Lakṣmaṇotsava*, *Rasamañjarī*, *Samñipī-takalikā*, Śārṅgadharā, *Vaidyājīvana*, *Vaidyasāgara*, *Vaidyavallabha*,²⁸⁴ *Vaidyavinoda*, *Yogacintāmaṇi*, and *Yogaśata*.²⁸⁵

Pītāmbara

Pītāmbara, a Jain monk, pupil of Jīva of the Āgamagaccha, is sometimes²⁸⁶ said to be the author of the *Anupānamañjarī*,²⁸⁷ a treatise in 151 verses on anupānas to be employed in order to counteract disorders caused by inorganic and poisonous substances, or to prevent the occurrence of these disorders.

The work is divided into six chapters (*samuddeśa* or *paṭala*), devoted respectively to disorders brought about by dhātus (chapter one), upadhātus (chapter two), poisons of vegetable origin (chapter three), and animal poisons (chapter four), to the killing (*māraṇa*) of the dhātus and upadhātus (chapter five), and finally to the anupānas to be prescribed in various diseases (chapter six).²⁸⁸

Pītāmbara wrote his work in Arjunapura or Ānāpura²⁸⁹ of Kūrmadeśa²⁹⁰ in the second half of the eighteenth century.²⁹¹

The *Anupānamañjarī* is referred to in the *Amṛtasāgara* of Pratāpasimha.

Pītāmbara

Pītāmbara, pupil of Vinayasāgarasūri of the Vijayagaccha, wrote the *Āyurvedasā-rasaṃgraha*,²⁹² a collection of formulae in Mewārī prose.

The recipes, containing vegetable drugs only, were obtained from a number of physicians mentioned by name: Ṛṣi Khimsī, Jośī Bhagvandās, Ṭhākursī Nānāval,

Bālgiri, etc.

The work was completed in Udaypur in A.D. 1702/03.²⁹³

Pratāpasīṃha

Pratāpasīṃha, Mahārāja of Jaypur, son of Mādhavasīṃha and grandson of Īśvarasīṃha, who flourished in the latter half of the eighteenth century (1778–1803), is credited with the *Amṛtasāgara*, more probably written at his behest.²⁹⁴ This work, originally written in Mārwārī, deals chiefly with nidāna and cikitsā.

Contents²⁹⁵

The treatise, composed in Sanskrit verse and Hindī prose, is arranged in four sections (khaṇḍa), divided into chapters (taraṅga).

The utpattikhaṇḍa has five chapters, which are about the descent of āyurveda, embryology, anatomy, and some general subjects. The vicāraḥkhaṇḍa is arranged in twenty-three chapters, which are concerned with the examination of the pulse and other forms of parīkṣā, anupānas, alchemical yantras, the purification of the dhātus, etc., weights and measures, pharmaceutical preparations, the properties of drugs and articles of food, sneha, vamaṇa, etc. The nidānakhaṇḍa describes in forty-four chapters the diseases, generally in the order of the *Mādhavanidāna*. The cikitsāḥkhaṇḍa, also in forty-four chapters, is about treatment.

The *Amṛtasāgara* adds the following diseases to those described in the *Mādhavanidāna*: one series of thirteen saṃnipāta fevers (III.3; IV.3), āmavātasamgrahaṇī (III.7), bhasmaka (III.9; IV.9), a number of eighty-four vātarogas (III.16), the forty pitta and twenty kapha disorders (III.20), seven additional types of insanity (unmāda) (III.15),²⁹⁶ vardhma (III.28; IV.28), snāyu and phiraṅgavāta (III.36; IV.36), somaroga and mūtrātisāra (III.41; IV.41), mantharajvara (III.42; IV.42),²⁹⁷ and seven acquired types of klaibya (male infertility and impotency) (III.43).²⁹⁸ The treatments consist of both āyurvedic prescriptions and rasayogas. Mantras are found in some chapters (IV.4, 15, 41), as well as yantras (IV.15 and 41).

The original *Amṛtasāgara* is referred to as prācīnāmṛtasāgara (III. 18), purāṇāmṛtasāgara (III.19), and pūrvāmṛtasāgara (III.15).

Sources of Sanskrit verses are: *Anupānadarpaṇa* (II.4),²⁹⁹ *Bhāvaprakāśa* (often), *Mādhava* (III.19), *Manu* (III.19), *Rasapradīpa* (II.3), *Ratnaprabhākara* (II.3),³⁰⁰ *Śrīṅgadhara* (II.7), and *Vaidyañjana* (II.1).

Sources mentioned in the Hindī text³⁰¹ are: *Anupānamañjarī* (II.4),³⁰² *Ātreya* ((IV.26), *Ātreyamata* (III.26), *Bhāvaprakāśa* (often), *Bṛhannighaṇṭu* (II.16), *Cakradatta* (IV.12, 15, 16, 19, 24, 25, 26, 27, 43), *Cakrapāṇidatta* (III.3), *Caraka* (III.13 and 26; IV.25), *Dhanvantarisamhitā* (IV.11), *Hārīta* (III.42; IV.11), *Jvaratimirabhāskara* (III.2; IV.2), *Kāśīnāthapaddhati* (IV.11, 20, 27), *Kṣīrapāṇi* (III.42), *Lolimarāja* (IV.1, 2, 3, 12), *Mādhavanidāna* (III.4, 15, 19, 27, 31, 42), *Manusmṛti* (III.19), *Nighaṇṭuprakāśa* (II.6), *Rājanighaṇṭu* (II.14, 16, 17, 19, 21), *Rasarājalakṣmī* (IV.11), *Rasaratnadīpa* (IV.19), *Rasaratnākara* (II.4), *Rasārṇava* (IV.19), *Rasasaṃgraha* (IV.34), *Rāvaṇa's Kumāratantra* (III.42), *Rudradatta* (IV.12),³⁰³ *Śrīṅgadhara* (II.4, 5, 7), *Sarvasaṃgraha*

(IV.8, 10, 12, 13, 20, 23, 26, 33),³⁰⁴ *Śivamata* (IV.8), *Suśruta* (II.13 and 21; III.17, 26, 42), *Triṣaṭagrantha* (IV.1),³⁰⁵ *Uddīśatantra* (IV.15), *Vāgbhaṭa* (II.1; III.26; IV.38), *Vaidyajīvana* (II.1; IV.1 and 9), *Vaidyakutūhala* (IV.32),³⁰⁶ *Vaidyarahasya* (IV.3, 7, 8, 9, 10, 11, 12, 13, 15, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 32, 36, 38, 39, 40), *Vaidyaratna* (IV.31), *Vaidyavallabha* (IV.38), *Vaidyavinoda* (IV.1, 6, 8, 10, 11, 12, 13, 14, 15, 18), *Vaidyopacāra* (IV.14),³⁰⁷ *Vṛnda* (IV.8, 12, 14), *Yogacintāmaṇi* (IV.3, 12, 41), *Yogarātnāvalī* (IV.15 and 24), and *Yogatarāṅgiṇī* (IV.8, 9, 11, 16, 19, 20, 24, 27, 32).

The *Rājavallabhanighaṇṭu*

The *Rājavallabhanighaṇṭu*³⁰⁸ is a *nighaṇṭu* dealing chiefly with articles of diet and related subjects. Its contents prove that it was intended for use at a royal court.

*Contents*³⁰⁹

The 971 verses of this treatise are arranged in six chapters (*pariccheda*). Chapters one, called *prābhātika* (26 verses), and two, called *paurvāhnikā* (151 verses), are about *dinacaryā* and kindred subjects. Chapter two deals, among other things, with oils (2.44–58), rubbing the feet, hands, and body with these oils (2.59–69), the qualities of water of diverse origin (2.70–121), the use of water for drinking and bathing purposes (2.122–132), articles of clothing (2.133–136), and fragrant substances employed for anointing the body (2.137–149). Chapter three, called *mādhyaḥna* (583 verses), is about the properties of grain and pulse (3.2–42), vegetables (3.43–214), fish (3.215–267), meat (3.268–316), alcoholic and other fermented beverages (3.317–331), honey (3.332–351), milk and dairy products (3.352–410), the sugarcane and its products (3.411–430), spices, condiments, salt and caustics (3.431–465), prepared dishes (3.466–535), rules concerning the taking of food (3.536–563), and the chewing of betel (3.564–580). Chapter four, called *aparāhna* (29 verses), is concerned with the types of country (4.6–9), as well as with *rasa* and *vipāka* (4.10–29). Chapter five, called *niśābhava* (31 verses), is about subjects pertaining to the generation of offspring. Chapter six, called *auśadhāśraya* (151 verses), deals with the properties of a series of drugs (6.1–111) and the regimen during the seasons.³¹⁰

Sources are not referred to by the author.³¹¹

Rājavallabha is quoted in Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, the commentary on Govindasena's *Paribhāṣāpradīpa*, and the *Śāligrāmaṇighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratnākara*. A commentary (*vivṛti*) on the *Rājavallabhanighaṇṭu* was written by Gaṅgādhara.³¹²

Special features

The *nighaṇṭu* sections in the proper sense do not enumerate synonyms. Noteworthy plants mentioned are: *boravavrihi* (3.16), *celāna* (3.104),³¹³ *cīruka* (3.171), *halīnaka* (6.42),³¹⁴ *jayapāla* (6.91), *jhīṅgāka* (3.99),³¹⁵ *kacvī* (3.115),³¹⁶ *kaṇṭā* (3.172–174),³¹⁷ *kāsundī* (3.436),³¹⁸ *khaṇḍakarna* (3.121),³¹⁹ *mahārāṣṭrī* (3.72),³²⁰ *mahārda* (3.166),³²¹ *sairipa* (6.41),³²² *śakrāśana* (6.48),³²³ *śālīṅca* (3.58),³²⁴ *śuṣaṇī* (3.72), and *udikā* (3.22–

24).³²⁵

Names of fishes mentioned are: āḍimatsya (3.231), bhallakī (3.233), bhākuṭa (3.229), caladaṅga (2.257), campakunda (3.252), candraka (3.251), ciḍaṅga (3.247), cilacima (3.263), citraphala (3.234), daṇḍika (3.253), elaṅga (3.261), gaḍaka (3.258), gaḍiṣa (3.250), gargara (3.235), gavātī (3.264), iliśa (3.238), kavapī (3.248), khalīśa (3.256), kṣudrasapharī (3.265), kulīśa (3.237), madgura (3.241), malaṅgī (3.255), nandāvarta (3.236), parvatī (2.259), pāthīna (3.230), phali (3.246), proṣṭhī (3.240), rohita (3.228), śakalī (3.249), śakula (3.243), śilinda (3.231), śṛṅgī (3.242), trikaṇṭa (3.254), vāca (3.260), vallīgaḍa (3.262), vāpuṣa (3.239), varmi (3.245), and varmuṣa (3.244).

The author

The text known as *Rājavallabhanighaṇṭu* is usually said³²⁶ to be the version revised by Nārāyaṇadāsa Kavirāja.³²⁷ Almost nothing is known about the original author, who is sometimes credited with two more medical works, the *Rājavallabhaparyāyamālā* and the *Ratnamālā*.³²⁸ According to some authorities³²⁹ he must have been an inhabitant of Bengal since the fishes described are well known there; according to others³³⁰ he may as well have belonged to the eastern part of Uttar Pradesh.

Date

Nārāyaṇadāsa Kavirāja is assigned to the eighteenth century.³³¹ The date of composition of the original of the *Rājavallabhanighaṇṭu*, prior to its revision, is unknown.

Raṅgajyotirvid

Raṅgajyotirvid is the author of a monograph on the treatment of haemorrhoids, called *Vicārasudhākara* or *Arśoghnasudhākara*, written for the future Peshwā,³³² Raghunātha Rāo (1773/1774), in 1765. The surgical treatment of haemorrhoids current among the Yavana or English physicians is referred to in this work.

The author mentions a number of contemporary physicians by name: Bābā Bhiṣagvarya, Bāgāji Vaidya, Balvantrāya Vaidya, and Jaya Śaṅkara. Sources of the work are: *Ātreyaśaṁhitā*, *Atriśaṁhitā*, *Bhāvaprakāśa*, Caraka, *Cikitsāmr̥tasāgara*, *Dhanvantariprakāśa*,³³³ *Sārasaṁgraha*, *Sārasamuccaya*, Suśruta, Vāgbhaṭa, *Vaidyāmr̥ta*, *Vṛndasaṁgraha*, *Yogatarāṅgiṇī*, etc.

The author, son of Sūryavidhi jñā, was a resident of Junnār³³⁴ in the Poona district; he died after 1780.³³⁵

Śaṅkara

Śaṅkara, whose full name was Plāntōlī Śaṅkaran Mūs, wrote the *Nidānapradīpa*, described as a work on the diagnosis of various ailments found scattered in Vāgbhaṭa's *Aṣṭāṅghṛdayasaṁhitā*.³³⁶ Another work by the same author is the *Lalitā* commentary on the *Aṣṭāṅghṛdayasaṁhitā*.³³⁷

Śaṇḍhacikitsā³³⁸

Tulajā I

Tulajā I, ³³⁹ alias Tukkojī I (1729–1735), one of the Maratha kings of Tanjore, son of Ekojī I and Dīpāmbikā, father of Ekojī II, is credited with three medical works: (1) *Āyurveda*, ³⁴⁰ (2) *Dhanvantarisāranidhi*, ³⁴¹ and (3) *Dhanvantarivilāsa*.³⁴²

Vaidyacintāmaṇi

Vaidyacintāmaṇi, son of Vaidyaratna and pupil of Narasiṃhakavirāja, is often regarded as the author of a very bulky medical work called *Prayogāmṛta*.

The author was a native of Nirol, a village belonging to the Śrīkhaṇḍa community. He completed his treatise at the end of the eighteenth century.³⁴³

The work ³⁴⁴ begins with the preparation of metals, etc., for medical use (rasādījāraṇavidhi), diagnostic procedures (the examination of the pulse, tongue, and urine), and taking the history of a patient (vaidyapraśnavidhi). The major part is concerned with therapy.

The order of the diseases is mostly in conformity with the *Mādhavanidāna*, but shows a number of additions and changes. Chapters on kṛmi and uraḥstambha occur between those on vātāroga and āmavāta. The chapter on hṛdroga is followed by one on urograha. A chapter on phulīngāroga³⁴⁵ is added between those on upadāṇṣa and śūkadōṣa; snāyuka is dealt with between visphoṭa and masūrikā. The chapters on women's diseases are in the following order: pradara, strīṭānukaroga, somaroga, vandhyāroga, kākavandhyā, mṛtavatsā, yonivyāpad, garbhīṇisevyāsevyavidhi, and garbhopakramaṇādividhi. The treatise ends with chapters on vājīkaraṇa and rasāyana.

Sources quoted are: Kaṇṭharava, *Mṛdānītantra*, Rāmarāja,³⁴⁶ *Rasayāmala*, *Ratnākara*, Śrīkaṇṭha,³⁴⁷ Sudāntasena, *Yogamuktāvalī*, *Yogarātana*, and *Yogarātnasamuccaya*.

The *Prayogāmṛta* is quoted in the *Śāligrāmaṇighaṇṭubhūṣaṇa* of the *Brhannighaṇṭunātana*.

Vaidyarāja

Vaidyarāja, son of Viśārada (and nephew of Ratnamāṇi), son of Vaidyacintāmaṇi, son of Vaidyavācaspati, son of Yadunātha, was the author of (1) *Sukhabodha*, (2) *Rasarasāraṇava*, (3) *Rasapradīpa*, and (4) *Vaidyamahodadhi*.

The *Sukhabodha*³⁴⁸ is a comprehensive work on therapeutics, written in a clear and easy style.

Apart from well-known authorities like Caraka, Suśruta and Vāgbhaṭa, it mentions the following sources: *Madanavinoda*, *Paribhāṣā*, *Rasādīpikā*, *Rasakalikā*, *Rasamañjarī*, *Rasaprayoga*, *Rasaratnākara*, *Rasendracintāmaṇi*, *Rasendrakalpadruma*, *Śāraṅgadhara*, *Sārasaṅgraha*, and Vaṅgasenaka. It quotes, besides these, from *Agnipurāṇa*, *Garuḍapurāṇa*, *Gopā(ḷa)saṃhitā*,³⁴⁹ *Kumāratantra* (by Rāvaṇa), *Sāralatikā*,

Vāsudeva, and Viṣṇu.³⁵⁰

The *Sukhabodha* was compiled in A.D. 1567 or 1702,³⁵¹ but, as the *Rasendrakalpadruma*, quoted in it, dates from the middle or second half of the seventeenth century,³⁵² the date of composition cannot be but A.D. 1702.

The *Rasasārṇava*³⁵³ is a short treatise in two chapters (upadeśa). The first deals with haritākiguṇāḥ and prakṛtyādi, the second with jvaralakṣaṇa, nāḍīparīkṣā, mūtraparīkṣā, tailaparīkṣā, netraparīkṣā, sādhyalakṣaṇa, asādhyalakṣaṇa, and nakṣatradoṣa.³⁵⁴

No particulars are known about the *Rasapradīpa*³⁵⁵ and the *Vaidyamahodadhi*.³⁵⁶

Vedakavi

Vedakavi was the author of an allegorical drama of the nāṭaka³⁵⁷ type on medicine, the *Jīvānanda*, or *Jīvānandana*.³⁵⁸

Special features

Interesting from a medical point of view are: the number of diseases assigned to a particular group; references to the doṣas, dhātus, layers of the skin, etc.; references to therapy; references to iatrochemistry and particular rasaauśadhas.

The number of diseases mentioned repeatedly disagrees with the classical āyurvedic texts, but is in many cases in conformity with the *Śāringadharasamhitā*. In agreement with the classical treatises are the thirteen saṃnipāta fevers (58). Rudra's wrath as the origin of fever is described (272). The names of fever in non-human living beings and in inanimate substances,³⁵⁹ as given in the *Jīvānanda* (273–274), are: pākala in elephants, abhitāpa in horses, alarka in dogs, indramada in fish, jyotis in herbs, cūrṇapa³⁶⁰ in grain, nīlikā in water, and ūsa in earth. Atisāra is of seven (61),³⁶¹ grahaṇī of five types (273).³⁶² Haemorrhoids (arśāṃsi) are of six varieties (61 and 277).³⁶³ Sluggishness of the digestive fire (agnimāndya) is said to be the cause of all diseases (278).³⁶⁴ Bhasmaka, a disorder of the digestive fire leading to bulimia, has a prominent place in the *Jīvānanda* as an illness from which king Jīva suffers.³⁶⁵ Yakṣman³⁶⁶ is said to be caused by great sins (mahāpātaka; 127).³⁶⁷ The number of varieties is five in śvāsa (54),³⁶⁸ six in mūrchā (281),³⁶⁹ six in unmāda (61 and 282),³⁷⁰ four in āmavāta (281),³⁷¹ eight in śūla (102 and 277),³⁷² eight in gulma (61 and 102),³⁷³ and five in hṛdroga (102 and 282).³⁷⁴ Eight types of mūtrakṛcchra are distinguished (277),³⁷⁵ thirteen of mūtrāghāta (277),³⁷⁶ four (277) or twenty (61) of aśmarī,³⁷⁷ twenty of prameha (61 and 277),³⁷⁸ fifteen of vṛaṇa (61 and 102),³⁷⁹ eight of bhagandara (277),³⁸⁰ and eighteen of kuṣṭha (61).³⁸¹ The diseases of the oral cavity and throat (mukharoga) are said to be seventy-four (102 and 279),³⁸² those of the nose eighteen (102),³⁸³ and those of the eyes ninety-six (102) or ninety-four (279) in number.³⁸⁴ The number of diseases of the head is excessively high, namely one hundred (102).³⁸⁵ Five diseases of the chest (vakṣoja) are mentioned (102), which are unknown in āyurvedic treatises. The eighty diseases by vāta, forty by pitta, and twenty by kapha are referred to (278). Kapha (81) or kapha and pitta together (266) are said to be crippled (paṇḍu), whereas vāta is considered to be the only active doṣa.³⁸⁶ The

relationships between the tastes and the doṣas are referred to (81), as well as those between the tastes and the seven dhātus (265).

The seven layers of the skin, the diseases located in each of the layers, and the treatment of these diseases are mentioned (248–255).³⁸⁷ Dinacaryā and ṛtucaryā are dealt with in act four. Several surgical instruments are described (205–207). Much importance is attached to iatrochemistry. Mercury and sulphur are important remedies in the *Jīvānanda*, as well as several rasauśadhas. Mercury is called Śiva's seed and sulphur Śarvāṇī's menstrual blood (35). Some of the processes to which mercury is subjected in Indian alchemy are mentioned (116). Some rasauśadhas referred to are, for example, ānandabhairava (291),³⁸⁸ cintāmaṇi (291), jvarāṅkuśa (291),³⁸⁹ mahātāleśvara (253),³⁹⁰ pūrṇacandrodaya (294), and rājamṛgāṅka (291).³⁹¹

The author and his date

The author of the *Jīvānanda* was a poet, called Vedakavi, who also composed another allegorical play, called *Vidyāpariṇaya*.³⁹² The *Jīvānanda* is modelled upon Kṛṣṇamiśra's *Prabodhacandrodaya* and similar plays. It is ascribed to the author's patron, Ānandarāyamakhin, the son of Nṛsiṃharāyamakhin and grandson of Gaṅgādharamakhin. Nṛsiṃharāya, of Bhāradvājagotra, was a minister at the court of Ekojī of Tanjore (1676–1683). Tryambakarāja, his younger brother, was a minister of Ekojī, Śāhajī (1684–1710) and Serfojī (1711–1728). Ānandarāyamakhin,³⁹³ who was a minister at the courts of Śāhajī, Serfojī and Tukoḥī, also called Tulajā (1729–1735),³⁹⁴ died during the last year of Tukoḥī's reign.

The *Jīvānanda* was written during the reign of Śāhajī and staged for the first time during a festival in honour of Śiva.³⁹⁵

Vidvadguṇavilāsa

Vidvadguṇavilāsa, pupil of Siddhivardhanopādhyāya Gaṇi of the Kharataragaccha, wrote his *Guṇayogaprakāśa* in 1717.³⁹⁶

Viśrāma

Viśrāma, pupil of Pītāmbara, was the author of the *Vyādhinigraha*.³⁹⁷

Contents

The *Vyādhinigraha* consists mainly of a collection of prescriptions against a large number of diseases, preceded by a maṅgala, addressed to the author's guru and iṣṭadeva, and two verses on diagnosis and treatment in general.

The diseases dealt with are: jvara (4–38), atisāra (39–52), pravāhikā (53–55), grahaṇī (56–62), arśas (also called harṣa) (63–68), kṛmi (69–70), śopha (71–75), mūtrakṛcchra (76–85), mūtrarodha³⁹⁸ (86–89), prameha (90–94), aśmarī (95–101), vātarakta (102–104), ajīṛṇa and viśūcikā (105–109), mandāgni (110–114), gulma (115–121), pāṇḍuroga (122–124), kāmālā (125–130), hāridraka (131–133), kuṣṭha

(134–141), sidhma (142–143), pāmā (144–145), dadru (146–147), pādasphuṭana (148), baddhakoṣṭha³⁹⁹ (149–152), śvayathūdara (153–159), plīhan (160–162), jalodara (163–165), raktapitta (166–171), pradara (172–177), garbhaparishrava (178), garbhapāta (179–180), naṣṭapuṣpa⁴⁰⁰ (181–182), raktasrāva in pregnant women (183), yonīśūla (184–187),⁴⁰¹ stanapīḍā⁴⁰² (188–189), yonīśūla (190–191), sūtikāroga (192–196), kṣaya (197–201), kāsa (202–214), śvāsa (215–222), hikkā (223–227), chardi (228–231), śūla (232–235), arocaka (236–237), trṣṇā (238–243), anidrā⁴⁰³ (244–245), mūrchā and tandrā (246–248), dāha (249–251), apasmāra⁴⁰⁴ (252–259), unmāda⁴⁰⁵ (260–261), ardita (262–264), dhanurvāta (265–266), śītāngaroga (268–270), āmavāta (271–274), rāndhāṇa (275–278), sandhivāta (279–283), vātāroga (284–304), amlapitta (305–307), visarpa (308–310), vraṇa (311–313), nāḍīvraṇa (314–315), visphoṭa (316), dagdhapīḍā⁴⁰⁶ (317–318), karṇamūlagranthi⁴⁰⁷ (319–320), karṇaka⁴⁰⁸ (321–322), śastraghāta⁴⁰⁹ (323–326), saptapuṭa, hoḍikā and copatikā (327–337), cipikā or cīpī and sadyovraṇa (338–340), nāsura (341), snāyuroga (342), ślīpada and valmīka (343–345), arbuda and rasolikā (346–349), gaṇḍamālā (350–352), lūtā (353–356), bhagandara (357–362), vidradhi (363–365), upadamśa (366–375), śītālā (376), ūrustambha (377–379), vicarcikā (380–382), ānāha (383–384), madhura(jvara) (385–387), sthaulya (388–389), āmbavāyu (390), loss of libido (391–393),⁴¹⁰ udāvarta (394–395), vyaṅga (396–397), khillaka (398), śīroroga (399–410), bhrūśaṅkhadoṣa (411), ardhāśīrṣa⁴¹¹ (412), nāsāroga (413–418), indralupta and other types of śīroroga (419–422), karṇāroga (423–426), oṣṭhadoṣa (427), dantaroga (428–429), jihvāroga (430–431), ghaṇṭikāroga (432–435), galaroga (436–439), mukharoga (440), svararoga (441–442), mukharoga (443–445), netraroga (446–456), and bālāroga (457–463).

The last part of the work is devoted to various subjects of general medical interest, some of which are: prakṛti (470–471), the eight branches of āyurveda (474–477), aṣṭa-parīkṣā (478),⁴¹² pañcakarman (479–481ab),⁴¹³ embryology (487–491), and anatomy (492–510).

Remarkable names of diseases are: āmbavāyu, cīpī, cipikā, copatikā, ghaṇṭīkāroga,⁴¹⁴ hoḍikā,⁴¹⁵ khillaka,⁴¹⁶ madhura(jvara),⁴¹⁷ nāsura,⁴¹⁸ rāndhāṇa,⁴¹⁹ rasolikā,⁴²⁰ saptapuṭa,⁴²¹ and śītāngaroga.⁴²²

The term ḍambhana is repeatedly used (329, 331, 339) for agnikarman (cauterization).

Noteworthy items of the materia medica are bodāra (336), copacīnī (295), māsṭakī (368), and pāraḍa (340).

Caraka is referred to once (177).

The author

Viśrāma mentions his name and that of his guru, Pītāmbara, at the end of the work. He also informs his readers that he belonged to the Āgamagaccha and lived in a town called Arjunapura in Kūrmadeśa.⁴²³

The author remarks that his treatise is based on various other works and the teachings of his guru.

The *Anupānamāñjarī* is sometimes ascribed to Viśrāma.⁴²⁴

Date

The *Vyādhinigraha* was completed in A.D. 1756/57.⁴²⁵

Yaśavanta

Yaśavanta wrote his *Vaidyacintāmaṇi* in 1792/93.⁴²⁶

Yogaratanākara

The anonymous *Yogaratanākara*⁴²⁷ is an elaborate and comprehensive compilation in verse.⁴²⁸

Contents⁴²⁹

Section one (pūrvakhaṇḍa): generalities (1–3), omina (3–4), the eightfold examination (aṣṭasthānanirīkṣaṇa) of a patient (4–13),⁴³⁰ kālajñāna, on signs foreboding death (13–14), types of country (14), the doṣas (14–16), āma (16), the constitutions (17), weights and measures (18–21),⁴³¹ a nighaṇṭu (21–43), the span of life allotted to a patient (43–46), dinacaryā, rātricaryā, and ṛtucaryā (46–80), types of water (80–82), milk and other dairy produce (82–91), oils (91–93), honey (93–94), the sugarcane and its products (94–95), urines (96), groups of condiments and drugs (97–100), pharmaceutical preparations (101–109),⁴³² the purification (śodhana) and killing (māraṇa) of the eight dhātus (109–120), the upadhātus, ratnas, viṣas and upaviṣas, the processes to which mercury has to be subjected, and various related subjects (120–146), substitutes for medicinal substances which are obtainable with difficulty (147–150), emetic and purgative procedures (150–154), nasya (154), karṇapūraṇa (154), bloodletting (154–155), some definitions (156–157), and the nidāna and treatment of diseases (157–910). Section two (uttarakhaṇḍa) deals with vājīkaraṇa (910–927), rasāyana (927–931), and anupānas (931–932).

A large number of sources are quoted by name:⁴³³ *Āśvinaśaṇṭhitā* (522),⁴³⁴ *Baud-dhasarvasva* (366), *Bhaṭṭārakahariścandra* (515),⁴³⁵ *Bhāvaprakāśa* (185, 186, 724, 741, 753, 789, 812, 853), *Bheda* (199), *Bhoja* (617, 618, 619, 620, 635, 731, 744, 745, 854), *Cakradatta* (170, 403, 653), *Caraka* (150, 515, 517, 563, 606, 730, 764), *Carpaṭa* (9), *Cikitsāḍīpa* (365),⁴³⁶ *Cikitsākalikā* (228, 319, 780), *Cikitsāsāra* (364, 365, 371, 376, 382, 386, 387, 389, 396, 398, 402, 403, 420, 428, 429, 715), *Dhanvantarīyamata* (282),⁴³⁷ *Gadanigraha* (248, 294, 327, 383, 446, 526, 540), *Gorakṣanātha* (377),⁴³⁸ *Hārīta* (493, 635), *Hemādri* (157),⁴³⁹ *Jaijñāta* (606),⁴⁴⁰ *Kadamba* (376, 475),⁴⁴¹ *Kāśyapa* (529),⁴⁴² *Kāśyapagrānta* (297),⁴⁴³ *Kāśyapasaṇṭhitā* (897), *Kṣīrapāṇi* (601), *Laghuyoga* (390, 410),⁴⁴⁴ *Lakṣmaṇasava* (701), *Madanapāla* (382),⁴⁴⁵ *Mādhava* (869),⁴⁴⁶ *Mālatīmukura* (105),⁴⁴⁷ *Manthānabhairava* (280), *Nārāyaṇīya* (364, 365),⁴⁴⁸ *Nimi* (800, 801), *Rājamārtanḍa* (302, 397, 555), *Rājanighaṇṭu* (99), *Rasamañjarī* (415), *Rasarājalakṣmī* (206, 249), *Rasaratanpradīpa* (357, 364, 366, 391, 397, 404, 415, 422, 426, 431, 480, 544), *Rasaratnasamuccaya* (483), *Rasārṇava* (735, 337), *Rasasindhu* (282), *Rasendracintāmaṇi* (279), *Ratanpradīpa* (293),⁴⁴⁹ *Rudratantṛa* (10),⁴⁵⁰ *Samgraha* (543),⁴⁵¹ *Sanṭhitā* (598, 789),⁴⁵² *Śaṅkarākhyā* (371),⁴⁵³ *Sārasaṇ-*

graha (338, 382, 386, 389, 390, 395, 399, 453, 475, 478, 507, 705), Śārngadhara (107, 200, 201, 320, 353, 359, 380, 381, 386, 388, 389, 397, 413, 420, 451, 466, 467, 468, 477, 478, 487, 490, 496, 521, 548), Suśruta (many times), Vāgbhata (150, 169, 229, 576), *Vaidyājīvana* (354, 355, 365, 370, 398, 403, 414, 487), *Vaidyālaṃkāra* (106), *Vaidyavilāsa* (330, 365, 370, 487),⁴⁵⁴ Vaṅgasena (347, 817, 863), Videha (168, 797, 798, 802), *Vīrasīmḥāvaloka* (327, 420, 453), Viśvāmītra (875), *Viṭṭhala* (429),⁴⁵⁵ *Vopadevākṛṣṭasāta* (489),⁴⁵⁶ *Vopadevaśata* (373, 380),⁴⁵⁷ *Vṛddhahārīta* (6),⁴⁵⁸ *Vṛddhāvāgbhata* (168, 170, 181), *Vṛnda* (243, 245, 293, 306, 355, 356, 364, 365, 371, 377, 395, 396, 402, 403, 409, 410, 420, 421, 425, 428, 430, 444, 452, 476, 477, 478, 483, 486, 488, 497, 511, 518, 522, 528, 532, 533, 534, 538, 540, 541, 555, 566, 579, 595, 610, 616, 701, 768, 842), *Yāmala* (12),⁴⁵⁹ *Yoga* (371, 389), *Yogarātnasamuccaya* (113, 199), *Yogarātnāvali* (106, 358, 388, 391, 451, 489, 568, 569), *Yogaśāra* (54, 335, 338, 381, 387, 388, 390, 391, 467, 525, 541), *Yogaśata* (371, 376, 388, 397, 425, 446, 474), *Yogaśata* (365),⁴⁶⁰ *Yogatarāṅgiṇī* (293, 306, 331, 334, 335, 357, 365, 372, 383, 386, 387, 388, 389, 396, 397, 403, 420, 421, 426, 428, 430, 595, 740), and *Yogatattva* (332).

Edition f gives more references to sources than g. Sources added in f are: *Anaṅgaraṅga* (1474, = g, 923), *Bhāvaprakāśa* (1206, = g, 752; 1209, = g, 753–754;⁴⁶¹ 1214, = g, 756; 1378, = g, 863; 1380, = g, 865; 1387, = g, 869; 1411, = g, 884; 1440, = g, 903; 1443, = g, 905; 1456, = g, 913;⁴⁶² 1485, = g, 930),⁴⁶³ *Cakradatta* (1352, = g, 848), Candrasena (1047, = g, 654),⁴⁶⁴ Caraka (458, = g, 289), *Cikitsākalikā* (1484, = g, 929), *Gadanigraha* (969, = g, 606),⁴⁶⁵ Hariścandra (853, = g, 535),⁴⁶⁶ Kadamba (898, = g, 563–564), Kṣīrapāṇi (960, = g, 600), Mādhava (1360, = g, 853), *Rājamārtaṇḍa* (1001, = g, 627; 1003, = g, 628; 1408, = g, 882; 1473, = g, 923; 1483, = g, 929), *Rasaratnākara* (213, = g, 138), *Rasaratnapradīpa* (1343, = g, 842),⁴⁶⁷ *Sārasaṃgraha* (874, = g, 549),⁴⁶⁸ Śārngadhara (833, = g, 523),⁴⁶⁹ Śivāgama (202, = g, 131), Suśruta (1432, = g, 897), Vāgbhata (897, = g, 563), *Vaidyājīvana* (278, = g, 177), *Vaidyavilāsa* (1212, = g, 756; 1403, = g, 879; 1421, = g, 891), Vaṅgasena (1309, = g, 820–821), Videha (1268, = g, 791), *Vīrasīmḥāvaloka* (463, = g, 292; 593, = g, 372),⁴⁷⁰ *Vopadevaśata* (702, = g, 446),⁴⁷¹ *Vṛnda* (278, = g, 177; 755, = g, 475;⁴⁷² 755, = g, 475;⁴⁷³ 859, = g, 539; 1248, = g, 779), *Yoga* (706, = g, 448; 755, = g, 475),⁴⁷⁴ *Yogarātnāvali* (1249, = g, 779),⁴⁷⁵ *Yogaśāra* (711, = g, 451;⁴⁷⁶ 1343, = g, 843), and *Yogatarāṅgiṇī* (709, = g, 450; 713, = g, 452–453;⁴⁷⁷ 1207, = g, 753).

Sources, absent from the above lists, but mentioned in the *Yogarātnākara* according to other scholars are: *Ārogyadarpaṇa*, *Aśvinīkumārasaṃhitā*,⁴⁷⁸ *Līlāvāṇī*,⁴⁷⁹ *Matimukura*,⁴⁸⁰ *Navaratnamālā*, *Nirṇayasindhu*,⁴⁸¹ *Śaṃkaramata*,⁴⁸² *Yogacintāmaṇi*, and *Yogapradīpa*,⁴⁸³ *Rasasārasaṃgraha* and *Rasendrasaṃhitā*,⁴⁸⁴ *Lolimbarāja*,⁴⁸⁵ and *Nirṇayasindhu*.⁴⁸⁶ Atrideva⁴⁸⁷ claims that the nighaṇṭu of the *Yogarātnākara* quotes Cakrapāṇidatta's *Dravyaguṇa*.

The verses of the *Yogarātnākara* on nidāna are usually those of Mādhava's *Rugviniścaya*, with the addition of other ones from sources not mentioned by name in most cases.

Authors and works quoting from or referring to the *Yogarātnākara* are: Āsubodha and Nityabodha Senagupta's commentary on the *Rasarātnasamuccaya*, the *Āyurvedīya*

Khani javijñāna, the *Bheṣajasaṇhitā*, Devasiṃha Viṭṭhal's *Bṛhadāsavarīṣṭasaṃgraha*, Dharmadatta's *Tridoṣasaṃgraha*, Govindadāsa's *Bhaiṣajyaratnāvalī*, Gulrājśarmamiśra's *Siddhaprayogalatikā* and *Viśikhānupraveśaviññāna*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpa-kvarasanirmānaviññāna*, Karandīkar's *Nidānadīpikā*, Khare's commentary on the *Rasaratnasamuccaya*, Lakṣmīrāma's commentary on the *Siddhabheṣajamanimālā*, Nirañjanaprasāda Gupta's *Pāradasaṇhitā*, Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the *Rasoddhāraṇatantra*, Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*, Somadevaśarma's commentary on the *Āyurvedaprakāśa*, and the *Rasāmṛta* and *Siddhayogasamgraha* of Vaidya Yādavaḥ Trikamajī Acārya. It was also used by the unknown author of the interpolated portions of Nīścalakara's *Ratnaprabhā*.⁴⁸⁸ The *Yogaratanākara* is one of the sources of Āryadāsa Kumārasīṃha's *Kvāthamanimālā* and Viśvanātha Dvivedī's *Rasendrasambhava*.

Special features⁴⁸⁹

The *nighaṇṭu* part of the *Yogaratanākara* enumerates properties; synonyms are only occasionally given.⁴⁹⁰ Noteworthy substances described are: āgastyaśimba (24), bheṇḍī (22),⁴⁹¹ brhanmarīca (24),⁴⁹² gaurabākucī (24),⁴⁹³ kṣupaja marica (24), mahāpīlu (27),⁴⁹⁴ miṣṭatumbī (22),⁴⁹⁵ pañcabhṛṅga (98), rāmāhvayaphala (27),⁴⁹⁶ śākūṭa (24),⁴⁹⁷ śītāphala (27),⁴⁹⁸ śyāmalaśākūṭa (25),⁴⁹⁹ and tamākhu (30).⁵⁰⁰

The verses on *rasaśāstra* mention two opinions on the composition of the group of the metals (*dhātu*); the first list consists of seven metals: gold, silver, brass (*āra*, = *pittala*), copper, lead, tin, and *tīkṣṇaka* (a kind of iron), to which by some mercury is added; the second list enumerates gold, silver, copper, tin, lead, brass (*rīṭikā*, = *pittala*), bell-metal (*ghoṣa*), and iron (109). Seven *upadhātus* are recognized: *abhraka*, *mākṣika*, *tāla*, *śilā*, *nīlāñjana*, *tutthaka*, and *rasaka*. Nine major poisonous substances are mentioned: *kālākūṭa*, *vatsanābha*, *śṛṅgaka*, *pradīpana*, *hālāhala*, *brahmaputra*, *hāridra*, *saktuka*, and *saurāṣṭrika* (142); the seven minor poisons are: *arkakṣīra*, *snūhīkṣīra*, *lāṅgalī*, *karavīraka*, *guñjā*, *aphipena*, and *dhattūra* (143).

The *Yogaratanākara* contains a long list of substitutes for drugs which are difficult to procure (147–150).

The order of the diseases agrees with the *Mādhavanidāna*. Diseases added are: one series of thirteen *saṃnipāta* fevers, namely *sandhika*, *antaka*, *rugdāha*, *cittavibhrama*, *śītāṅga*, *tandrika*, *kaṇṭhakubja*, *kaṇṭhaka*, *bhugnanetra*, *raktaṣṭhivī*, *pralāpaka*, *jihvaka*, and *abhinyāsa* (160–162);⁵⁰¹ a fever called *mantharajvara* (214–215);⁵⁰² *jvarātisāra* (233–239); *pādakaṇṭhaka* (439); *ūrdhvaṇṭha* (440); *śītavāta*, *sparśavāta*, and *raktavāta*⁵⁰³ (441); *urograha* (535); *bahumūtrameha* (polyuria; 576–577); *vardhma* (611); *agnidagdha* (654–656); *candrakavara* (672);⁵⁰⁴ *pūtiprameha* (672);⁵⁰⁵ *snāyuka* (716–718); *śītālā* (724–727);⁵⁰⁶ *somaroga* and *mūtrātisāra* (843–845). *Phiraṅgaroga* is not described separately, but is included in the group of diseases called *upadaṇṣā*.⁵⁰⁷

The formula of *khaṇḍakūṣmāṇḍaka* (308) does not agree at all with that of the *Bhāvaprakāśa*.⁵⁰⁸ The chapter on *galagāṇḍa*, etc., contains a verse, ascribed to Bhoja, on types of *granthi* which are incurable or difficult to cure (619) that is already found

in Gayadāsa's commentary on the *Suśrutasaṃhitā*.⁵⁰⁹ The recipe of puṣyānugacūrṇa (841) differs slightly from that found in the *Carakasamhitā*.⁵¹⁰

The description of the yoni-roga called udāvartā (845) differs from that in the *Carakasamhitā*;⁵¹¹ the anḍinī type (846) corresponds to the phalinī type of the *Suśrutasaṃhitā*.⁵¹² The chapter on yoni-roga mentions that a daughter is born from the left nāḍī of the female reproductive system, a son from the right nāḍī (848). The formula of phalaghṛta (848) differs very much from that present in the *Aṣṭāṅgahṛdaya* and agrees with that found in the *Bhāvaprakāśa*.⁵¹³ The chapter on yoni-roga also contains prescriptions against infertility in women (847–849), as well as contraceptive and abortifacient formulae (849–850),⁵¹⁴ recipes which tighten the vagina (851),⁵¹⁵ recipes effective against yonidāha (a burning sensation in the vagina) (851),⁵¹⁶ etc.

The chapter on strī-roga describes that parturition may be impossible due to contraction (sāmkoca) of the birth channel (garbha), caused by vāta (861).⁵¹⁷ The same chapter leaves the treatment of mūḍhagarbha (malpositions), even the surgical interventions, to experienced midwives (862–863).⁵¹⁸ Some verses on the treatment of mūḍhagarbha have been borrowed from Vaṅgasena (863–864).⁵¹⁹ The *Yogarātnākara* advises pressing of the vaginal canal just after delivery, in order to prevent the entry of vāta (864). The employment of poultices (upanāha) is recommended in diseases of the breasts (stanaroga) (869), although this type of treatment is said to be contra-indicated in most āyurvedic treatises.⁵²⁰ The chapter on kṣīradoṣa and its treatment⁵²¹ has a long list of articles of diet, patterns of behaviour, etc., which should be recommended to a pregnant woman, followed by a series of unwholesome things (871).⁵²² Prescriptions against the evil effects of overuse of mercurial compounds are also found in the treatise (925–927).

The verses on therapy contain both āyurvedic recipes and rasaśuśadhas.⁵²³

Some new formulae may be found in the *Yogarātnākara*: gokṣurādiguṭī (568),⁵²⁴ candraprabhāguṭī (568),⁵²⁵ bālaharītakīyoga (671),⁵²⁶ mahākṣāraguṭī (672),⁵²⁷ pūgādiyoga (672),⁵²⁸ and kadalīkandaghṛta (844).⁵²⁹

Verses on pathyāpathya are found at the end of the sections on treatment.

Many formulae of pākas are present in the *Yogarātnākara*.⁵³⁰

Noteworthy medicinal plants and substances prescribed are: bhīmasenakarpūra,⁵³¹ bhūparṇikā (461),⁵³² bhūṣarkarā (461),⁵³³ bhūtāṅkuśa (461),⁵³⁴ copacīnī (671),⁵³⁵ gaṅgāvatī (461), grdhramahīruha (460),⁵³⁶ heru (460),⁵³⁷ kabāba (691), karahāṭikā (135),⁵³⁸ kāruṇjī (461),⁵³⁹ kevaṇī (460),⁵⁴⁰ kuṇjarikā (460),⁵⁴¹ kusari (460),⁵⁴² madhupūṣpikā (461),⁵⁴³ mṛgakhurī (461),⁵⁴⁴ murdāḍaka (672),⁵⁴⁵ nepatī (461),⁵⁴⁶ paṅgula (460),⁵⁴⁷ phalā (461),⁵⁴⁸ picchalikā (460),⁵⁴⁹ poṭa (466),⁵⁵⁰ rasakarpūra,⁵⁵¹ rāyapurī śarkarā,⁵⁵² sākurāṇḍa (461),⁵⁵³ sauraka (672),⁵⁵⁴ śiveta (460),⁵⁵⁵ śvetapuṣpa (205),⁵⁵⁶ vaiṣṇavikā (461),⁵⁵⁷ vāsani (460),⁵⁵⁸ and virojā (672).⁵⁵⁹

The author

The identity of the author remains unknown. According to some he must have been a resident of southern India since most of the MSS are found there and the *Yogarātnākara* is still much in use in Mahārāṣṭra. The author's name was Mayūrapāda Bhikṣu according to some Indian scholars.⁵⁶⁰

Date

The quotations from the *Vaidyavilāsa* by Raghunātha Paṇḍita, composed in A.D. 1697, and the existence of a MS, dating from A.D. 1746,⁵⁶¹ prove that the *Yogaratnākara* was compiled during the first half of the eighteenth century. The earliest author to establish this date was S.L. Katre,⁵⁶² P.K. Gode⁵⁶³ assigned the work to the period 1650–1725 on account of the quotation of Kamalākara's *Nirṇayasindhu*, composed in 1612,⁵⁶⁴ the verses on tobacco,⁵⁶⁵ and the MS dating from 1746. P.V. Sharma regards the work as having been written towards the end of the seventeenth century because it quotes Lolimbarāja and Trimalla's *Yogatarāṅgiṇī*.⁵⁶⁶ The most appropriate date for its composition is A.D. 1676 according to N. Saxena.⁵⁶⁷ The *Yogaratnākara* is regarded as dating from the eighteenth century by Atrideva⁵⁶⁸ and S. Upadhyaya.⁵⁶⁹

The *Yogaratnākara* should not be confused with another medical work of the same title, written in caupāī verse in old Gujarātī by a Jain author, called *Nayanaśekhara*, pupil of Jñānaśekhara, in 1633 or 1680.⁵⁷⁰

Chapter 4

Nineteenth-century authors and works

ABHIDHĀNACANDRIKĀ by Bhīmasena. Other works by the same author are a Sūpaśāstra and the Vaidyabhūṣaṇā.

The Abhidhānacandrikā¹ is a glossary of medical terms; its preface is to a great extent taken from the Dhanvantarīyanighaṇṭu.

The Sūpaśāstra is a treatise on cooking.²

The Vaidyabhūṣaṇā appears to be a comprehensive medical treatise.³

The Vaidyabodhasaṃgraha of a Bhīmasena may or may not be by a different author.⁴

Bhīmasena wrote his works in the second half of the nineteenth century. He was highly respected by Kṛṣṇa Rāja Wodeyar III, king of Mysore, who was placed on the throne by the British in A.D. 1799 and who died in 1868. Bhīma was also patronized by Kṛṣṇa Rāja's son, Cāmarāja Wodeyar.⁵

ABHINAVANIGHAṆṬU, compiled by Dattarām Nārāyaṇadatta Caube, son of Dattarām.⁶ The subject matter is arranged in twenty-four chapters (varga) and an appendix (pariśiṣṭa). Chapter one deals with pharmacology in general; chapters two to twenty-four describe medicinal substances, their names and their properties, mainly along the lines of the Bhāvaprakāśanighaṇṭu; the appendix, called Yūnānī Dravyaguṇasaṃgraha, is devoted to drugs borrowed from Islamic medicine.⁷

The author was a resident of Mathurā.⁸

ĀGNEYĀYURVEDAVYĀKHYĀ by Gaṅgādhara.⁹

AJĪRṆAMANJARĪ by Dattarāma,¹⁰ a short monograph on disorders of digestion (ajīrṇa).

The benedictory verses are addressed to Dhanvantari and Kṛṣṇa. The treatise begins with the statement that ajīrṇa is the main cause of all diseases; it proceeds with its nidāna (4–5),¹¹ its definition (6) and a description of its six varieties (7–13).¹² One verse (14) is devoted to the general treatment of the four chief varieties, two verses (15–16) are about the number of days required for ajīrṇa, caused by some specified articles of diet, to disappear when dietary restrictions are observed.¹³ Thirty-two verses (17–48) deal with ajīrṇa brought about by a long series of particular substances and its treatment by prescribing substances considered to be counteractive. Thirteen verses (49–61) are about ways of treating various discomforts; the preparation of śukta and veśāvāra is also described (58–60) in this section of the work. The treatise ends with the statement

(62) that the author, Dattarāma, compiled the *Ajīrṇamañjarī* from the words of various sages.¹⁴ A *pariśiṣṭa* of nine verses contains some compound formulae. A part of the *laṣṇakalpa* from the *Kāśyapaśaṃhitā* is appended at the end.

The only authority quoted by name is *Kāśyapa* (49).

A comparison with *Kāśīnātha's* *Ajīrṇamañjarī* learns that more than half of *Dattarāma's* verses were borrowed from it.

The description of *ajīrṇa* caused by particular substances and its treatment by means of specified other substances is not found in the classical *saṃhitās* and appears rather late in *āyurvedic* literature.¹⁵

A noteworthy article of diet mentioned in the *Ajīrṇamañjarī* is *cīnārūka* (46).¹⁶

No particulars are known about the author.

The treatise was completed in 1882/83.¹⁷

*ANUPĀNATARĀṄGIṆĪ*¹⁸ by *Raghunāthaprasāda*.

The work consists of 522 verses, arranged in seven chapters (*vīci*), and is composed in the form of a dialogue between a husband and his beloved wife. The latter is the receiver of teachings about *anupānas* to be taken in conjunction with inorganic medicinal substances prepared by means of alchemical processes. These substances are the *dhātus* (chapter one), *upadhātus* (chapter two), mercury (*rasa*) and its compounds (chapter three), sulphur (*gandhaka*) and its compounds (chapter four), the *uparāsas* (chapter five), and the *ratnas* (chapter six). Chapter seven is on diverse *anupānas*. Alchemical topics, such as the *śodhana* and *māraṇa* of the *dhātus*, etc., and the mythical origin of mercury, are also dealt with. The preparation of *rasakarpūra*, to be used in the treatment of syphilis, is described in chapter three (76–84).

The author employs, in order to designate *śūla*, the unusual term *śivaśāstrābhidhagada* (3.69).¹⁹ Noteworthy words are also *varakha* (1.26 and 2.55)²⁰ and *gulkanda* (6.21).²¹

The *Anupānatarāṅgiṇī* is quoted in the *Pāradasaṃhitā*.

At the end of the work the author gives his genealogy: *Bālaśarman*, a *brāhmaṇa* of *Kānyakubja* lineage, living on the banks of the *Bhāgīrathī*, i.e., the *Ganges* – *Vīreśvara* – *Kāśīnātha* – the physician *Govardhana* – the physician *Tāpīrāma* – *Sītārāma* – *Raghunāthaprasāda* (7.30–34).²²

The author was probably active during the second half of the nineteenth century.²³

ĀROGYADARPAṆA, compiled by *Jagannātha Śarman*.²⁴

ĀROGYAKALPADRUMA by *Kaikkulaṇṇara Rāma Vāriyar* (1832–1896).²⁵ This treatise is a therapeutic manual in verse; its author is a poet who is well known in Kerala.²⁶

ĀROGYASTOTRA by *Gaṅgādhara*.²⁷

ĀRYAGRHAČIKITSĀ by *Vinodalāla Sena*.²⁸

AUṢADHASINDHULAHARĪ, compiled by *Kṛṣṇadāsavasumallika*.²⁹ The same author wrote a Bengali commentary on the *Mādhavanidāna*, called *Nidānārthacandrikā*.³⁰

AUṢADHIKALPALATIKĀ, compiled by Bastīrāma.³¹

ĀYURVEDADARPANA, compiled by Nārāyaṇa Rāy from Caraka, Suśruta, Vāgbhaṭa, Hārīta and other authorities.³²

ĀYURVEDAPARIBHĀṢĀ, compiled by Śāradācaraṇa Senagupta and Pyārīmohana Deva.³³

ĀYURVEDĀRTHACANDRIKĀ, compiled by Śyāmācaraṇa Gupta.³⁴

ĀYURVEDAŚABDĀRṆAVA, compiled by Gaṅgāprasāda Śarman, son of Guru Dīnalā-
la Śarman of Dvivedipura. This work is a glossary of materia medica, compiled from
Sanskrit authorities and with explanations in Hindī.³⁵

ĀYURVEDASAMGRAHA by Gaṅgādhara.³⁶

ĀYURVEDASAMGRAHA, compiled by Devendranātha Senagupta and Upendranā-
tha Senagupta. This work consists of a collection of extracts from the treatises of
Caraka, Suśruta and Vāgbhaṭa, and from the Rasaratnākara, Rasaratnasamuccaya,
Kūṭamudgara, Nāḍīvijñāna, etc.³⁷

ĀYURVEDASĀRASAMGRAHA, compiled by Gopālacandra Senagupta.³⁸

ĀYURVEDASUDHĀKARA by Raghunāthaprasāda Sukala.³⁹

ĀYURVEDAVIJÑĀNA⁴⁰ by Vinodalāla Sena.⁴¹

This comprehensive treatise, written in versé and prose, is divided into four sec-
tions: sūtrasthāna (78 chapters), śārīrasthāna (15 chapters), dravyasthāna (41 chapters
and a parīśiṣṭa), and nidāna-cikitsasthāna (87 chapters).

The sūtrasthāna deals with the descent of āyurveda (āyurvedāvataṛaṇa), technical
rules (paribhāṣā), pañcakarman, the preparation of caustics (kṣārapāka), bloodletting
(raktasrāva), the examination of a patient (rogiparīkṣā), blunt and sharp instruments
(yantraśāstrādivarṇana), the purification and killing of the dhātus (dhātuśodhanamāra-
ṇa), etc.

The śārīrasthāna is about anatomy and physiology; the dravyasthāna is concerned
with materia medica.⁴²

Chapter one of the nidāna-cikitsasthāna is devoted to general concepts related to
pathology, chapters two to eighty-two are concerned with the nidāna and treatment
of diseases. These diseases are arranged in a way that completely differs from Mā-
dhava's order, while many new diseases are described too. The order of chapters two
to twenty-five may serve as an example: jvara, viṣamajvara, jvaracikitsā, jvarātisāra,
plīhan, yakṛdroga, pāṇḍu-kāmalā-halīmaka, śoṭha, udara, raktapitta, rājayakṣman, kā-
sa, svarabheda, hikkā-śvāsa, hṛdroga, urastoya, krimi, agnimāndya, arocaka, atfśāra,
grahaṇī, amlapitta, śūla, gulma.

The subjects of chapters eighty-three to eighty-seven are: apamumūrṣu, vīryasta-

mbha, rasāyana, vājīkaraṇa, and karmavipāka. The treatise ends with a short pariśiṣṭa. The treatments described are of a mixed type: āyurvedic prescriptions and rasayogas are found side by side.

The influence of western medicine is clearly discernable in the Āyurvedavijñāna.

Sources referred to in the introductory part of the work⁴³ are: Bhāvaprakāśa, Cakradatta, Caraka, Hārīta, Rasaratnākara, Rasendracintāmaṇi, Suśruta, Vāgbhaṭa, and Vaṅgasena.

Sources and authorities quoted or referred to in the body of the treatise are: Ātreya (II: 376), Bhāvaprakāśa (II: 95), Bhoja (II: 432, 551, 558), Caraka (II: 464, 504), Dakṣiṇāmūrtisaṃhitā (II),⁴⁴ Kārttika (II: 472), Kāśyapaśaṃhitā (II: 607), Śabdakalpadrūma (II: 196), Śakteyagrantha by Dhanvantari (II: 196), Śātātapa (II: 632), Suśruta (II: 24, 94, 97, 217, 464, 488, 504, 512, 560), Urabha (II: 376), and Viḍeḥa (II: 479).⁴⁵

The Āyurvedavijñāna is one of the sources of Āryadāsa Kumārasimha's Kvāthamaṇimālā, the Bheṣajasaṃhitā, and Devasimha Viṭṭhal's Bṛhadāsavārīṣṭasaṃgraha; it is quoted in the Pāradasaṃhitā and Rasayogasāgara.

Dissection is recommended for anatomical studies. The circulation of the blood is described.⁴⁶ The contraction of the pupil caused by opium and its dilatation by Datura seeds are known to the author. Percussion (abhighātaparīkṣā) and auscultation (śravaṇaparīkṣā) are described, but not the stethoscope. The number of bones is said to be 246, in agreement with Urabha, who is quoted on the subject. The terms dhamanī and nāḍī are used to designate arteries; a lymphatic vessel is called a srotas and a nerve a snāyu. The functions of heart and lungs and the digestive processes are described in agreement with western medicine, as well as the urinary tract and the reproductive organs.⁴⁷

Noteworthy substances mentioned in the dravyasthāna are:⁴⁸ amaravallī,⁴⁹ antamala,⁵⁰ dhūnarāja,⁵¹ kaṭuvīrā,⁵² mahātiktā,⁵³ majjaphala,⁵⁴ picchilā,⁵⁵ pītakūṣmāṇḍa,⁵⁶ pītamūlī,⁵⁷ pīvarī,⁵⁸ prajāvatī,⁵⁹ saḥāsāra,⁶⁰ saṇṇividā mañjari,⁶¹ śārdūlakanda,⁶² śītābīja,⁶³ srāvikā, śrīvāsasāra,⁶⁴ sudhāmūlī,⁶⁵ surapriya,⁶⁶ svarṇapattrī,⁶⁷ śyāmaḥīja,⁶⁸ śyāmaparṇī,⁶⁹ and viśalyakaraṇī.⁷⁰

The dravyasthāna also describes some recently introduced oils,⁷¹ such as dīpyakataila, jāṭīphalataila, khasabījātaila, lavaṅgataila, nikumbhataila, rālatāila, vātādatāila,⁷² and yakṣadrumataila.

Special features of the nidāna-cikitsasthāna are:⁷³ three series of thirteen saṃnipāta fevers;⁷⁴ the chapter on plīhan (6) adds verses, which may derive from the author himself, to those found in the Mādhavanidāna; the chapter on diseases of the liver (yakṛdroga; 7) may have been written by the author and describes, for example, the surgical treatment of a liver abscess (61); the chapter on rājayakṣman (10) includes the treatment of a disorder called kaṇṭhakṣata; the chapter on hr̥droga (16) describes a series of new diseases: āvaraṇika, kauṣṭhika, pṛthuka, āyānikā, parikṣaya, medaḥ-sūtra, and vikṣepikā;⁷⁵ new terms employed in the chapter on diseases of the heart are hr̥dvepathu or koṣṭhasaṃvepana (a kind of arrhythmia) and hr̥tkoṣṭhapeśīsūtra (the muscle fibres of the heart); the description of vaccination against smallpox in the chapter on masūrīkā (31) agrees with a quotation in the Śabdakalpadrūma from

a Śākteyagrantha by Dhanvantari;⁷⁶ the variety of masūrikā, called romāntikā, is described according to some unknown source (a granthāntara); śītalā is not mentioned in the chapter on masūrikā; śvitra is described in detail in the chapter on kuṣṭha (33); a description of aupasargikopadaṁśa, i.e., syphilis, is found in the chapter on upadaṁśa (38); aupasargikopadaṁśa is also called pāpopādaṁśa and viśopadaṁśa, but the term phiraṅgaroga is absent; the first stage of syphilis is called mukhya, the later stages are designated by the term gauṇopadaṁśa; vradhna⁷⁷ is described in the chapter on vṛddhi (45); the chapter on vātavyādhi (47) contains a new disease, āgantuja pakṣāghāta;⁷⁸ the chapter on mūrchā and related disorders (53) describes śaiśavaśarṇyāśa,⁷⁹ not known from other treatises; the chapter on women's diseases (strīroga; 79) contains descriptions of some new diseases: raktamādrī, śaṣṭhibādhaka, aṅkura, jalakumāradoṣa, yonyākṣepa,⁸⁰ yonyāṅkuravṛddhi or -saṁvṛtti,⁸¹ jarāyuroga,⁸² and aṇḍādhāragada; the chapter on vīryastambha (84) consists of prescriptions which are thought to delay ejaculation during intercourse; the chapter on karmavipāka (87) consists of quotations from Śātātapa.

The nidāna-cikitsasthāna describes a series of diseases,⁸³ together with their treatment, which are also found in Govindadāsa's Bhaiṣajyaratnāvalī: urastoya (chapter 17),⁸⁴ pāradavikāra (chapter 40),⁸⁵ smaromāda (chapter 51),⁸⁶ gadodvega or apadārthagada (chapter 52),⁸⁷ yoṣāpasmāra (yoṣāpasmārahādhikāra of chapter 54 on apasmāra),⁸⁸ tattvonmāda (chapter 56),⁸⁹ acalavāta (chapter 57),⁹⁰ khañjanikā (chapter 58),⁹¹ tāṇḍavaroga (chapter 59),⁹² snāyusūla (chapter 60),⁹³ klomaroga (chapter 61),⁹⁴ vṛkkāmaya (chapter 62),⁹⁵ bahumūtra,⁹⁶ madhumeha,⁹⁷ somaroga and mūtrātisāra (chapter 67),⁹⁸ śukrameha,⁹⁹ aupasargikameha,¹⁰⁰ ojomeha,¹⁰¹ and lasikāmeha (chapter 68),¹⁰² dhvajabhaṅga (chapter 69),¹⁰³ śiṣāmburoga (76),¹⁰⁴ mastiṣkavepana¹⁰⁵ and mastiṣkacayāpacaya (chapter 77),¹⁰⁶ aṁśughāta¹⁰⁷ and skhālitya (chapter 78),¹⁰⁸ yonikaṇḍū¹⁰⁹ and aṇḍādhāragada or ḍimbādhāragada (chapter 79),¹¹⁰ and apamūṛṣu (chapter 83).¹¹¹

Both āyurvedic recipes and rasayogas are found in the verses on treatment. References to formulae described in volume I are frequent.

Noteworthy substances prescribed are: kirāva (537),¹¹² nallakī (536), pītamūlī (48, 49, 57, 59), and tāmrāmūlī (50).¹¹³ Opium (aḥipheṇa, bhogipheṇa, phaṇipheṇa, etc.) is rather frequently mentioned.¹¹⁴

The author states at the end of the work that he was a grandson of the physician Nityānanda and a son of Rājakiśora; he adds that he was a resident of Ambikā.

The author informs us at the end of his work that it was printed in 1883.¹¹⁵

ĀYURVEDĪYADRAVYĀBHIDHĀNA by K.B. Lāl Sengupta.¹¹⁶

ĀYURVEDĪYAKAUTUKAVILĀSA, compiled by Rāmamohana Vidyāvinoda.¹¹⁷

ĀYURVEDĪYAPARIBHĀṢĀ by Gaṅgādhara.¹¹⁸ This work, consisting of 314 verses and prose passages, arranged in seven chapters (prakaraṇa), deals with the following subjects: (1) weights and measures (māna), (2) the rules to be applied when the parts of a plant to be used, the quantities and ratios of ingredients, etc., are not explicitly mentioned in recipes (anuktaprakāśana), (3) details on the preparation of a kalka, etc., (4)

the elucidation of obscure points in the preparation of medicines (avyaktavivecana), (5) rules for a pāka, (6) deliberations on the prakṣepa (ingredients to be added to a compound medicine), and (7) the elucidation of subjects merely hinted at in medical treatises (leśoktaviveka).

Works and authors quoted are: Carakasamhitā, dharmasāstra, Dṛḍhabala, Manusmṛti, smṛtiśāstra; Suśrutasaṃhitā, Taittirīyopaniṣad, Viṣṇusaṃhitā, and Yājñavalkyasaṃhitā.

ĀYUSTATTVAVIJÑĀNA by Vinodalāla Sena.¹¹⁹

BHAIṢAJYA-DHANVANTARI, compiled by Candrakāntadāsa Kavirāja.¹²⁰

BHAIṢAJYARĀMĀYAṆA by Gaṅgādhara.¹²¹

BHAIṢAJYARATNĀVALĪ, compiled by Ravidatta Śāstrin, son of Śivasahāya, of Beri.¹²²

BHAIṢAJYAVIJÑĀNA, compiled by Īśānacandra Vandhyopādhyāya.¹²³

BHĀSKARODAYA by Gaṅgādhara.¹²⁴

The BRHANNIGHAṆṬURATNĀKARA,¹²⁵ compiled by Dattarāma,¹²⁶ is a very large medical treatise of an encyclopaedic nature.

Volume one consists of an introduction and nineteen chapters (adhyāya). The introduction contains a maṅgalācaraṇa, the genealogy of the author, and verses on the position of āyurveda among the sciences.

Chapter one deals with definitions of āyurveda, the eight parts (aṅga) of āyurveda,¹²⁷ and the origin of āyurveda (āyurvedotpatti).

The first part of the story about the origin of āyurveda, up to the appearance of Suśruta, has been taken from the Bhāvaprakāśa. Added to it by Dattarāma are: the appearance of Vāgbhaṭa; an enumeration of the eighteen āyurvedic saṃhitās by Hārīta, Suśruta, Parāśara, Bhoja, Bheḍa, Bhṛgu, Agniveśa, Caraka, Cyavana, Agasti, Vārāha, Vāgbhaṭa, Nārāyaṇa, Nārasimha, Ātreya, Atri, Śaśin, Śiva, and Bhāskara;¹²⁸ a series of authors and works on rasaśāstra;¹²⁹ the Rasaratnākara by Siddha Nityanātha and the Rasendracintāmaṇi by Ṭuṇṭūnātha; the Rugviniścaya by Mādhavakara; the names of a series of commentators: Bhaṭṭāra, Jejjāta, Gadādhara, Vāpyacandra, Śrīcakrapāṇi, Bakula, Īśvarasena, Īśāna, Kārtika, Sukīra, Sudhīra, Maitreya, and Mādhava;¹³⁰ Cakrapāṇi's Cakradatta; the Nighaṇṭurāja by Nārasimha from Kāśmīr; Bhāvamiśra and his Bhāvaprakāśa.

Chapter one ends with verses on basic concepts.

Chapters two, three and four are almost identical with chapters two, three and four of the Sūtrasthāna of the Suśrutasaṃhitā and bear the same titles. Chapters five, six and seven, also taken from the Suśrutasaṃhitā, agree with chapters one, two and three of its Śārīrasthāna, but some new material has been added to the text of Suśruta. Chapter eight is based on chapter four of the Śārīrasthāna of the Suśrutasaṃhitā, but contains a large number of additions which betray the influence of western anatomy. Chapters nine to fourteen are, apart from some extra material, the same as chapters five to ten of the Śārīrasthāna of the Suśrutasaṃhitā; chapters fifteen to nineteen are the same as chapters five, seven, eight, nine, and twenty-five of the Sūtrasthāna of the Suśrutasaṃhitā.

Volume two contains chapters twenty to thirty-four. Chapters twenty to twenty-four are practically the same as chapters eleven to fifteen of the *Sūtrasthāna* of the *Suśrutasamhitā*. Chapter twenty-five is partially the same as chapter twenty-one of *Suśruta's Sūtrasthāna*. Chapters twenty-six to twenty-nine contain the complete text of the *Caryācandrodaya*, a work on *ṛtucaryā*, *dinacaryā* and *rātrīcaryā*, compiled by *Dattarāma* and also published as a separate work.¹³¹ Chapter thirty is identical with chapter ten of the *Sūtrasthāna* of the *Suśrutasamhitā*. Chapters thirty-one and thirty-two are on prognostic signs (*dūtavarṇana*; *śakunavarṇana*). Chapter thirty-three consists of a separate treatise, in 149 verses, on dreams and their meaning, the *Svapnaprakāśikā*. Chapter thirty-four contains *Dattarāma's* treatise on pulse-examination, the *Nāḍidarpaṇa*;¹³² it is followed by twenty-three verses on the examination of the pulse according to the *Yūnānī* system and eighteen verses on the same subject according to western medicine.

Volume three has not been accessible to me.

Volumes four to six are devoted to diseases and their treatment. Their contents are for a very large part identical with those of volume two of the *Nighaṇṭuratnākara*. The verses on *karmavipākā* and astrology are different in a small number of instances.¹³³

Volumes seven and eight contain an extensive *nighaṇṭu*, the *Śāligrāmanighaṇṭubhūṣaṇa*, compiled by *Śāligrāma*. It describes the names and properties of a large number of medicinal substances in twenty-seven *vargas* and a *pariśiṣṭa*; the botanical, vernacular and English names are also recorded in most of the cases.

Sources, mentioned in volumes one, two, and four to six, are: *Ātreya* (II: 492), *Bharadvājasamhitā* (I: 98), *Bhāvaprakāśa* (I: 168), *Bhoja* (I: 245), *Bhojanakutūhala* (II: 646), *Brahmaṇḍapurāṇa* (II: 689), *Bṛhatsamhitā* (I: 98–99), *Bṛhadyogatarāṅgiṇī* (I: 59), *Caraka* (I: 136, 199 and 310; IV: 222), *Hariścandra* (II: 541), *Kṣemendra* (II: 489), *Madhukoṣa* (II: 452), *Manu* (I: 107), *Padmapurāṇa* (IV: 221), *Pārāśara* (V: 1), *Samgraha* (I: 114 and 160), *Śārṅgadharma* (I: 169), *Suśruta* (I: 106), *Vāgbhaṭa* (I: 104, 111, 112, 118, 145, 165, 186, 205; II: 450, 493, 498), *Vaidyasārasaṃgraha* (II: 494 and 501), *Vaiṣṇavāgama* (I: 137), *Varāhamihira* (I: 100), *Vṛddhavāgbhaṭa* (I: 177 and 317), and *Yogārṇava* (IV: 276).

Sources mentioned in the *Śāligrāmanighaṇṭubhūṣaṇa* are: *Amarakoṣa* (807), *Ātreyasamhitā* (35, 39, 42, 45, 47, 128, 247, 282, 400, 403, 492, 510, 538, 565, 572, 573–574, 583, 613, 616, 637, 678, 688, 845, 870, 890, etc.),¹³⁴ *Bhaiṣajyacikitsā* (47, 87),¹³⁵ *Bhāvaprakāśanighaṇṭu* (passim), *Dhanvantarinighaṇṭu* (passim), *Dravyacihna* (14),¹³⁶ *Dravyaguṇa* (826, 830), *Dravyaguṇadīpikā* (1021),¹³⁷ *Gaṇanighaṇṭu*¹³⁸ (45, 164, 234, etc.),¹³⁹ *Hārītasamhitā* (816, 818, 823, 833, 835, 843, 864, 899, 918, 934, 965, 966, 968, 969, 971–972, 981, 984, 994, 995, 996, 997, etc.), *Kaiyadeva* (164), *Koṣa* (771), *Laṅkānātha* (1073),¹⁴⁰ *Laṅkeśa* (173),¹⁴¹ *Madanapālanighaṇṭu* or *Madanavinoda* (passim), *Nighaṇṭucūḍāmaṇi* (166), *Nighaṇṭuratnākara* (passim), *Nighaṇṭusaṃgraha* (208), *Niruktaratnākara* (26),¹⁴² *Prayogāmṛta* (34), *Rājanighaṇṭu* (passim), *Rājavalābhanighaṇṭu* (passim), *Rasacandrikā* (237, 736), *Rasendrasārasaṃgraha* (238), *Ratnākara* (759, 761, 763, 765, 767, 774, 793–794, 810, 902, 913, 925, 935, 938, etc.), *Śivanighaṇṭu* (155, 164, 196),¹⁴³ *Śoḍhalanighaṇṭu* (passim), *Suśeṇa* (258, 583, 864, 901, 994, 1089), *Suśrutasamhitā* (494, 498, 553, 599, 619, 769, 995, etc.),¹⁴⁴ *Trikāṇḍaśeṣa* (922), *Vāgbhaṭa* (814, 828, 831, 843, 858), *Vaidyanigha-*

ṇṭu (128, 132, 353, 813, 977), Vaidyaśrīvana (682), Vikāratimirabhāskara (129, 243, 257, 306),¹⁴⁵ Viṣṇudharmottara (771), Vṛddhasuśruta (979), and Yuktikalpataru of Bhojarāja (791, 795).¹⁴⁶

The Brhannighaṇṭurātṇākara is one of the sources of Āryadāsa Kumārasīṃha's Kvāthamaṇimālā, the Bheṣajasaṃhitā, and the Rasoddhāratāntra. The Śāligrāmanighaṇṭu(bhūṣaṇa) is quoted in Gulrājśarmamiśra's commentary on the Āyurvedaprakāśa and in the Rasadhātuprakāśa.

Some anatomical descriptions of chapter eight of volume one betray the influence of western anatomy.¹⁴⁷ The diseases dealt with are the same as in the Nighaṇṭurātṇākara, but the seven types of śītalā and the hymn to Śītalā are omitted.

Noteworthy substances described in the Śāligrāmanighaṇṭubhūṣaṇa are:¹⁴⁸ ādityapatrā, four types of ahiphena (231–232: śveta-, kṛṣṇa-, pīta-, citravarṇa), ākākarabha (155–156), two types of ākhukarṇī (478–480: brhatī and laghvī ā-khukarṇī),¹⁴⁹ several types of ālu (942–946: raktālu,¹⁵⁰ rājālubheda, gajakarṇālu, mukhālu, kāsālu,¹⁵¹ phoṇḍālu, pāṇīyālu, nīlālu,¹⁵² śubhrālu; 954–955: śaṅkhālu,¹⁵³ kāṣṭhālu,¹⁵⁴ madhurājāluka, raktarājāluka, śvetālu, kṛṣṇavanāluka, vanāluka), anannāsa (633),¹⁵⁵ āri (1236),¹⁵⁶ three types of ativiṣā (219–220: śuklā, kṛṣṇā, aruṇā), two types of bhallātaka (222–225: bhallātaka and nadībhallātaka),¹⁵⁷ bhissatā (1252),¹⁵⁸ bhramaracchallikā (1236–1237),¹⁵⁹ bhūṣimbikā (647),¹⁶⁰ two types of bījapūra (578–581: bījapūra and vanabījapūra), two types of bimbī (912–915: bimbī and tiktābimbī), cāha (1216–1217),¹⁶¹ six types of campaka (493–496: campaka, śveta-, nāga-, sultāna-, nīla-, bhūmicampaka),¹⁶² caṇḍālakanda (952),¹⁶³ candrikā (131–132: = candraśūra), cīḍā (27),¹⁶⁴ copacīnī (153–155), three types of dantī (395–398: dantī, brhaddantī, bhadradantī), two types of devadāru (26–27: snigdhadāru and kāṣṭhadāru),¹⁶⁵ ekavīra (1234–1235),¹⁶⁶ elīyaka (420),¹⁶⁷ eraṇḍacirbhīṭa (1246–1247: = vātakumbhaphala),¹⁶⁸ gaṅgāṭī (422),¹⁶⁹ three types of gholikā (865–866: gholikā = loṇī,¹⁷⁰ rāja- and kṣudragholikā), granthigobhī (1256),¹⁷¹ two types of hapuṣā (156–157: hapuṣā and svalpaphalā hapuṣā), hastajodī (953),¹⁷² five types of hayārī (307–309: śveta, rakta, pātala, pīta, kṛṣṇa),¹⁷³ herambavṛkṣa (1244),¹⁷⁴ īṣadgola (1218–1219),¹⁷⁵ seven types of jambū (648–651: jambū, mahā-, kṣudra-, kāka-, bhūmi-, rāja-, jalajambū),¹⁷⁶ jhaṇḍu (518),¹⁷⁷ jhilla (1234),¹⁷⁸ jhullapuṣpa (1251–1252),¹⁷⁹ six types of kadālī (557–564: kadālī, āraṇya-, kāṣṭha-, suvarṇa-, mahendrakadālī, kṛṣṇā kadālī), kājūtaka (647–648),¹⁸⁰ three types of kāncana (323–325: rakta, śveta, pīta), karalī (880–881),¹⁸¹ six types of karañja (336–340: karañja, mahā-, ghrta-, gucca-, pūtikarañja, karṇayukta karañja),¹⁸² six types of karkaṭī (893–896: karkaṭī, ervārūka, tṛtīyākarkaṭī, arāṇyakarkaṭī, tikta-, cīnākarkaṭīkā),¹⁸³ seven types of karpūra (1–6: karpūra, potāśraya, īśāvāsa, himakarpūraka, udayabhāskara, parṇakarpūraka, cīnakarpūra), two types of kaṭabhī (700: kaṭabhī and śvetakaṭa-bhī), kaṭuvīrā (1219–1220),¹⁸⁴ five types of khadira (671–674: rakta- and śvetasāra khadira, viṭkhadira, laghu-, vallikhadira),¹⁸⁵ four types of kharjūrī (569–572: kharjūrī, bhūmi-, piṇḍakharjūrīkā, sulemānī), kṛṣṇabīja (404),¹⁸⁶ kṣudrabadāma (1248),¹⁸⁷ kṣudraketakī (420–421),¹⁸⁸ kuraṇḍikā (1229–1230),¹⁸⁹ two types of lajjālu (456–457: lajjālu and viparītā lajjālu), māda (708),¹⁹⁰ mahākāya (859),¹⁹¹ mahārāṣṭrī (1222),¹⁹² makhāna (1232),¹⁹³ māravallī (1233),¹⁹⁴ māyāphala (1212), nāgajihvā (1250),¹⁹⁵ two

types of nārikela (565–568: nārikela and mohajātīyaka nārikela), five types of pāṭalā (265–267: pāṭalā, śvetā, bhū-, kṣudrā, valīpāṭalikā), pattragobhī (1256),¹⁹⁶ four types of pippalī (116–123: pippalī, saimhalī, vanapippalī, markatī),¹⁹⁷ several varieties of pūgaphala (607–611: āndhrodbhava, campāvātībhava, roṇṭasaṃjña, valgulagrāmaja, candāpurabhava, guhāgarodbhava, nailavadgrāmasaṃbhūta), puspagobhī (1255),¹⁹⁸ rājagiri (1253),¹⁹⁹ rāmaphala (632),²⁰⁰ revatcīnī (1215),²⁰¹ sahasramūlikā (874),²⁰² sājaka (708),²⁰³ sājaka (821–822),²⁰⁴ samudraśoṣa (1239),²⁰⁵ sarpadamṣṭrā (1223–1224),²⁰⁶ sītāphala (631–632),²⁰⁷ sudhāmūlī (1219),²⁰⁸ svarṇapattirikā (403),²⁰⁹ tailakanda (952),²¹⁰ tamākhu (1217–1218),²¹¹ tejomantha (270),²¹² triparṇī (953),²¹³ several types of ṛṇa (373–377: ūṣala, ikṣudarbha, gomūtrikā, śilpikā, niḥśreṇikā, garamoṭikā, majjara, mṛgapriya, vaṃśapatrī, manthānaka, dhenupriya, pallivāha, lavānatṛṇa, paṇyandhā, guṇḍa, vṛttaguṇḍa, caṇṇikā, guṇḍasīnī, śūlī), three types of tulasī (524–525, 530–531: śvetā and kṛṣṇā tulasī, āraṇyatulasī), tuvara (1245–1246),²¹⁴ three types of udumbara (658–661: udumbara, nadyudumbarikā, kākodumbarikā), two types of vaṃśa (361–363: vaṃśa and randhravaṃśa),²¹⁵ vanapsā (1254),²¹⁶ two types of vṛddhadāru²¹⁷ (1238: vṛddhadāruka and phaṇḍī), three types of yāvanāla (819–821: dhavala, tuvara, śāraḍa),²¹⁸ and three types of yavānī.

Dattarāma, who descended from a family of Māthuriya brāhmaṇas, gives in the introductory verses of the Bṛhannighaṇṭuratanākara the following information on his ancestors: he was the son of Kṛṣṇalāla, and grandson of Hariścandra; the latter was the youngest of the three sons of Ghāṣirāma, in his turn the son of Gopīnātha.

Śāligrāma, the compiler of the Śāligrāmanighaṇṭubhūṣana, was a Māthura vaiśya, of Candravanāśa and Āhlādagotra. At the end of the work he informs us of his genealogy: Bālamukunda – Govardhanadāsa – Hariyaśārāja – Gopāladāsa – Puruṣottamadāsa – Motīraṇa – Padmanetra – Ghanaśyāmadāsa – Sītārāma; Śāligrāma was the son of Ānandarūpa, also called Khusālārāya, the youngest of the three sons of Sītārāma.

Śāligrāma was born in Murādābād in 1831/32. Besides the Śāligrāmanighaṇṭubhūṣana, he also wrote the Śāligrāmauśadhaśabdasāgara or Āyurvedīya Ausadhīkoṣa²¹⁹ and a rather large number of Hindī translations of Sanskrit medical works. In 1897/1898 he founded the Āyurvedoddhāraka dispensary in Murādābād.²²⁰

CARYĀCANDRODAYA²²¹ by Dattarāma, son of Kṛṣṇalāla.²²² This is a rather comprehensive treatise, for the greater part in verse,²²³ on ṛtucaryā (chapter one; 1–57), dinacaryā (chapter two; 58–236), and rātrīcaryā (chapter three; 236–272).

A large part of chapter two is devoted to articles of food, their qualities and actions. Numerous dishes are described, in part known from earlier treatises such as the Madanapālanighaṇṭu and Bhāvaprakāśanighaṇṭu. The descriptions are, however, not quoted from these works. Some noteworthy dishes are: agastyasāraka (140), bhaimīlapsikā (104), gulorikā (107–108), khājā (110–111),²²⁴ kvāthālī (148), mallapūpa (111), māṣaraṅgī (151), and niṣpanda (102). Vernacular terms are sometimes employed: baraphī (198),²²⁵ haluvā (196),²²⁶ peḍā (197). Sources are occasionally referred to: Ātreya (27), Bhojanakutūhala (177),²²⁷ Brahmāṇḍapurāṇa (219), Kṣemendra (25), Vāgbhaṭa (28 and 34), and Vaidyāsārasaṃgraha (29 and 36).

The entire text of the Caryācandrodaya forms part of Dattarāma's Bṛhannighaṇṭu-

ratnākara.²²⁸

CIKITSĀCAKRASĀRA, compiled by Dvārakānātha Datta Kavirāja.²²⁹

CIKITSĀJNĀNĀJANA, compiled by Prasannacandra Śiromaṇi.²³⁰

CIKITSĀMAÑJARĪ, compiled by Mahimacandra Sena.²³¹

CIKITSĀSAMGRAHA by Bholānāthamiśra. The author, a resident of Mustafapur in the district of Patnā and the great-grandfather of P.V. Sharma, completed this work in 1890/91.²³²

CIKITSĀSAMGRAHA by Prabhunāthamiśra. The author, a resident of Mustafapur in the district of Patnā and the grandfather of P.V. Sharma, completed this work in 1871/72.²³³

COBACĪNĪPRAKĀŚA by Madhusūdanaśarma Gosvāmin.²³⁴ This work is a monograph on the China root or sarsaparilla (cobacīnī, copacīnī, covacīnī),²³⁵ a drug employed in the treatment of syphilis and other diseases. The author was a son of Vrajārāja Gosvāmin and father of Rādhākṛṣṇa and Devīdattaprasāda. He was attached to the court of Rājajit Siṃha (1780–1829).²³⁶

DRAVYAGUṆĀBHIDHĀNA by Vinodalāla Sena.²³⁷

DRAVYĀRTHACANDRIKĀ (or Āyurvedīyadravyaguṇābhidhāna), compiled by Siddheśvara Gupta.²³⁸

HASTĀMALAKA by Vaidya Bavabhai. This is a treatise on the preparation of metallic compounds, written in 1859.²³⁹

HINDUVAIDYASĀSTRA, compiled by Subrahmaṇya Śāstrin.²⁴⁰

HRDAYAPRIYA²⁴¹ by Parameśvara.²⁴² This work²⁴³ is divided into four sections (khaṇḍa) with a total of sixty chapters. The first three sections, comprising forty-eight chapters, are based on the Aṣṭāṅgaḥṛdayasaṃhitā; the last section contains formulae taken from other sources. The author states at the beginning of his work that many verses of the Hṛdayapriya were taken verbatim from the Aṣṭāṅgaḥṛdayasaṃhitā, while other stanzas were composed by himself, without deviating from the sense of those found in Vāgbhaṭa's work.²⁴⁴

Quotations from the Hṛdayapriya are found in 'Indian medicinal plants' by P.K. Warrier, V.P.K. Nambiar and C. Ramankutty (1994–1996).²⁴⁵

Noteworthy plant names from the work are: aghorī,²⁴⁶ bhadrā,²⁴⁷ bhūkesara,²⁴⁸ gārūḍī,²⁴⁹ kṣetrajñabhūṣā,²⁵⁰ rajatārī,²⁵¹ śaśāśruti,²⁵² and vairī.²⁵³

Parameśvara²⁵⁴ was a śivadvīja, i.e., a brāhmaṇa of the Müssad caste, which ranks highly among the Ambalavāsi of Kerala.²⁵⁵ He was born in Vaikom (to the north of Travancore) and adhered to the family tradition of serving the Śiva temple of Vaikom, from his eleventh to his seventeenth year. In the early part of his career as a man of

letters he became attached to the palace of Koṭunnallūr, i.e., Cranganore, as a disciple and protégé of Godavarman Yuvarāja (1800–1851), who was a great patron of learning and a Sanskrit scholar himself.²⁵⁶ According to a local tradition, Parameśvara studied āyurveda in order to get rid of a persistent skin disease. In his later years he acquired great fame as a medical practitioner and was honoured by three successive Mahārājas of Travancore, viz. Uttanam Tirunāl, Āyilyam Tirunāl and Visākham Tirunāl.

The Hṛdayapriya was composed in 1864. Parameśvara died in 1887.²⁵⁷

KALPASĀGARA, an anonymous work on the art of preparing medicines, composed under the patronage of Raṇavīra Siṅha, who ascended the throne of Jammū in 1857.²⁵⁸

LOKAHITAVADYASĀSTRA, a manual of pharmacology, compiled by Kunnumburattu Cheriyakelan Vaidyan.²⁵⁹

LOLAMARĀJA, also called Vaidyājīvana, a treatise in Hindī verse, composed by Benī-prasāda in 1842/43. It is in the form of a dialogue between a man and a woman and has been modelled on Lolimarāja's Vaidyājīvana.²⁶⁰

MṚTYUŢĪJAYASAMHITĀ by Gaṅgādhara.²⁶¹

MṚTYUSAMJIVANĪ, charms and antidotes against all kinds of poison, snake-bites, etc., compiled from Suśruta and other authors, and translated into Bengali.²⁶²

NIDĀNADĪPIKĀ by Vyāṅkaṭeś Kṛṣṇa Karaṇḍīkar,²⁶³ a compilation from various sources on nidāna.²⁶⁴

Adhyāya I: (1) paribhāṣākathana; (2) nibandhanirūpaṇa; (3) doṣadhātumalakṣa-yavṛddhikathana. Adhyāya II (kāla-jñānīya): (1) grahāvalokana; (2) āyur-jñānīya; (3) kāla-jñānīya; (4) dūtasvapnaśakunajñānīya. Adhyāya III: (1) jvara; (2) saṃnipāta, āgantujvara, viśama-jvara, śītavātādi. Adhyāya IV: yakṣman, śoṣa, kāsa, śvāsa, hikkā, arocaka, chardi, svarabheda, dāha, tṛṣṇā, hṛdroga, urogaha, śleṣmaroga. Adhyāya V: pārṇauroga, raktapitta, raktāmaya, raktāśrayavyādhi, pittavyādhi, vātaśoṇita, vidradhi, arbuda, ślīpada, udara. Adhyāya VI (pacanāśayavyādhivijñānīya): agnimāndya, ajīrṇa, kṛmivāta, gulma, ānāha, śūla, amlapitta, śītapitta, atisāra, ūrustambha, āmavāta, grahaṇī, arśas, antraroga, plīhayakṛdroga. Adhyāya VII (bastimūtrapīṇāmaya-kathana): mūtrakṛcchra, mūtrāghāta, aśmarī, meha, pramehapiṭikā. Adhyāya VIII (manovyādhyadivātavādhivijñānīya): mūrchā, madātyaya, mada, unmāda, apasmāra, vātavyādhi. Adhyāya IX: avārānīya, sadyomṛtyunidāna. Adhyāya X (tvagrogakathana): galagaṇḍa, gaṇḍamālā, apacī, granthī, visphoṭa, masūrikā, granthiviyaktīkaraṇa, piṭikāvyaktīkaraṇa, kuṣṭha, śoṭha, vahnidagdhavraṇa, vraṇa, nāḍīvraṇa, āgantuvraṇa, visarpa, snāyuka, kṣudraroga. Adhyāya XI (guhyarogakathana): bhagandara, upadaiṇṣa, śūkadoṣa, śukradoṣa, śāṇḍhya, vṛddhi. Adhyāya XII (strīrogavijñānīya): yoniroga, yonikanda, pradara, garbhāśayaroga, vandhyātva, garbharoga, garbhīṇīla-kṣaṇa, sūtikā, stanaroga, stanyaroga. Adhyāya XIII: bālāmaya, grahapīḍā. Adhyāya XIV (viśatantra): jaṅgamaviṣa, sthāvaraviṣa. Adhyāya XV (īrddhvāṅgarogajñānīya):

mukharoga, dantamūlaroga, oṣṭharoga, jihvāroga, tāluroga, kaṇṭharoga, mukhāntargataroga, karṇaroga, karṇapālīroga, durviddhasaṃbhavaroga, karṇamūlaroga, nāsāroga, śīroga, kapālaroga, netraroga, vartmaroga, netrasandhigataroga, śuklagataroga, kṣṇagataroga, kācabindu, timiraroga, liṅganāśa, abhiṣyandaroga, adhimantharoga, sarvākṣīroga. Adhyāya XVI (nidānapūraṇīya): udāvarta, medoroga, kārsya, bhagna, janapadoddhvarṇasavyādhi, pañcakarmādyapacāraroga, nivāraṇīya.

Sources mentioned are: ²⁶⁵ Añjana²⁶⁶ (I.1.15; 3.91; III.1.13 = Añjananidāna 11; 2.109, 111; IV.180 = Añjananidāna 73, and 260ab = Añjananidāna 135cd); Ātreya (I.1.16; 3.108); Bhāṭṭāraka (V.130); Bheda (III.2.178; XII.177); Bhoja (V.130; X.20); Brhājāta (II.1.1); Caraka (passim); Dhanvantari (I.1.16; III.2.238; XII.127); Dṛḍhabala (IV.264; V.219; XI.123); Hariścandra (IV.264); Hārīta (I.1.16; 3.103; III.2.238; IV.10); Hārītātreya (I.1.15; IV.10; V.30, 70); Jātūkarmya (XII.84); Jejjāta (V.30; VI.137, 153); Jvaraparājaya (I.1.17; III.1.4, 43; 2.77, 184, 222, 230, 268, 295); Jyotirvid (II.1.1); Jyotiṣasārāvalī (II.1.1); Kālaḥjñāna (I.1.16; 3.34; IX.138); Kāśyapa (VI.155); Kṣṇavallabhin (I.1.15; III.2.106, 109, 124, 215, 268); Mādhava (I.1.15; 3.83; III.1.9, 12); Nidānasāra (I.1.16; 3.51, 166; III.2.196); Nighaṇṭu (I.3.91); Saṃnipātakalikā (I.1.17); Sārasaṃgraha (I.3.190; III.2.176, 196; V.35, 70, 74); Suśeṇa (I.1.14); Suśruta (I.1.16 and passim); Svarodaya (I.1.16); Tisāta (I.1.14, 32, 40; 3.3); Upacārasāra (I.1.16; III.2.170, 176, 223; IV.201, 205, 267; X.4, 137); Vāgbhaṭa (I.1.16 and passim); Vīrasīṃha (I.1.14; 3.11, 88); Vṛnda (I.1.15; 3.3, 83); Yogaratnākara (IX.151, 155); Yogaśāta (I.1.15; III.2.222).

The sources are not referred to consistently. Many verses borrowed from, for example, the Mādhavanidāna, are not indicated as such.²⁶⁷

The order of the diseases does not follow an established pattern and is peculiar to this treatise. Diseases or groups of diseases added to those found in the Mādhavanidāna are: urograha, śleṣmaroga,²⁶⁸ raktāmaya,²⁶⁹ raktāśayavyādhi, pittavyādhi,²⁷⁰ antrarodha,²⁷¹ plīhayakṛdroga,²⁷² mada, vahnidagdhaveṇa, snāyuka, śukradoṣa, śāṇḍhya, garbhāśayaroga, vandhyātva, kapālaroga, durviddhasaṃbhavaroga,²⁷³ karṇamūlaroga, janapadoddhvarṇasaroga,²⁷⁴ and pañcakarmādyapacāraroga.

The chapter on saṃnipātajvara describes two series of thirteen fevers of this type: the first begins with sandhika,²⁷⁵ the second with prorūṇava.²⁷⁶ Another fever characterized in this chapter is hāridraka.

The chapter on āgantujvara describes fevers called ajīrṇajvara, svedajvara, dṛṣṭijvara, malajvara, daivikajvara, and kālajvara.

The chapter on viśamaajvara mentions kṛmijvara, bhūmivibudhajvara (= brāhmaṇajvara), kṣatraajvara, vaiśyajvara, and śūdraajvara.

The chapter on śītavāta describes a saṃnipātajvara called thus, which is of three types: madhyama, viśama and adhama.

The raktāśayavyādhi is not mentioned in other treatises.²⁷⁷

Twenty-two children's diseases are distinguished: three doṣic types and an additional fourth type of dantodbheda, dantaghāta, dantaśabda, kāladanta, ahipūtana, mukhapāka, mukhasrāva, gudapāka, upaśīrṣaka, pārśvāruṇa, tālukaṇṭa, vicchinna, pārigarbhika, daurbalya, gātraśoṣa, śāyāmūtra, kukūṇaka, rodana, and ajagallī (XIII.1–4). Other children's diseases described are kṣīrālāsaka (XIII.17), utphullikā (XIII.49), ku-

nda (XIII.52), and gādarī (XIII.53).

The chapter on sthāvaraviṣa describes the symptoms of poisoning by haratāla (= haritāla), manahṣilā, vaṅga (tin), māṅṣikadhātu, apakvamalla, śulba (copper), nāga (lead), tuttha, darada (cinnabar), rasakarpūra, vatsanābha, dhattūra, ahiphena (opium), jepāla, snuḥikṣīra, and kāraskara.

Five types of karṇamūlaroga are distinguished, arising from vāta, pitta, kapha, saṃnipāta and blood respectively.

Other subjects added are: avāraṇīya,²⁷⁸ sadyomītyu,²⁷⁹ granthivyaktikaraṇa,²⁸⁰ piṭikāvyaktikaraṇa,²⁸¹ garbhīṇīlakṣaṇa,²⁸² and nivāraṇīya.²⁸³

The Nidānadīpikā is interesting on account of its quotations from works like the Jvaraparājaya, Upacārasāra, etc.

The chapter on yonikanda, a disease described for the first time in the Mādhavanidāna, adds to Mādhava's verses the prodromes, quoted from the Upacārasāra and Sārasaṃgraha.

The author hailed from Mahārāṣṭra and was a pupil of Bālakṛṣṇa, son of Kāśīnātha.²⁸⁴

NIDĀNAPARIŚIṢṬA, a supplement to Mādhava's Rugviniścaya, written by Hārādhana Vidyaratna, son of Viśārada.²⁸⁵

THE NIGHAṆṬURATNĀKARA, a large and comprehensive treatise, was compiled by Viṣṇu Vāsudeva Goḍbole and his associates.²⁸⁶

Volume one consists of twenty sections (prakaraṇa), subdivided into chapters (adhyāya) which are mostly in verse.²⁸⁷ These sections are respectively devoted to the properties of medicinal substances (1; guṇadoṣaprakaraṇa), embryology and anatomy (2; suśrutaśārīraprakaraṇa), the eight ways of examining a patient (3; aṣṭavidhaparīkṣāprakaraṇa), general subjects and technical rules (4; sāmānyaparibhāṣā), alchemical apparatus (5; yantraprakaraṇa), puṭapāka (6; puṭakalpanāprakaraṇa), alchemical subjects (7–12; dhātuśodhanamāraṇa, upadhātu-, pārada-, gandhaka-, abhraka-, haritālaprakaraṇa), collyria (13; añjanaprakaraṇa), and alchemical subjects again (14–20; hirākasa-,²⁸⁸ gerū-,²⁸⁹ uparasa-, ratna-, uparatna-, viṣa-, and upaviṣaprakaraṇa). Appended to volume one are the Arkaprakāśa and the Ājñamañjarī. Volume two deals, in seventy-seven sections, with the aetiology, symptomatology, and treatment of diseases.

Section one of volume one, while mainly describing properties of drugs, adds sometimes a series of synonyms.²⁹⁰ Section two is for the greater part identical with the Śāñīrasthāna of the Suśrutasamhitā, but here and there some additional material has been incorporated. Section three not only deals with the eight types of examination (nāḍī-, mūtra-, mala-, jihvā-, śabda-, sparśa-, netra- and mukha-, and finally rūpaparīkṣā), but also with kālajñāna (i.e., signs foreboding death), the chāyāpuruṣa,²⁹¹ some general statements about diseases, the doṣas, and finally the signs of increase and decline of the doṣas, dhātus and malas. Section four is concerned with weights and measures, beneficial and unhealthy substances, substitutes for certain drugs, the tastes, the guṇas, vīrya, vipāka and prabhāva, dinacaryā, rātricaryā, ṛtucaryā, sneha, sveda,

vamana, etc., the five types of kaṣāya, etc. Section nine (pāradaprakaraṇa) describes, among other things, the eighteen saṃskāras to which mercury is subjected.

The sections of volume two are arranged in agreement with the Mādhavanidāna; at the end two sections have been added.

Sources are in general not referred to.²⁹²

The Nighaṇṭuratnākara is quoted in the Āyurvedīya Khanijavijñāna, Caube Kyā-khūbadāsa's Ajīṇṇatimiraḥhāskara, Hariprapanna's Rasayogasāgara, Hariśaraṇānanda's Kūpīpakvarasanirmānavijñāna, Niraṇjanaprasāda Gupta's Pāradasaṃhitā, the Rasadhātuprakāśa, the Rasatattvavivecana, the Śāligrāmanighaṇṭubhūṣaṇa of the Brhannighaṇṭuratnākara, and the commentary on the Siddhabhaiṣajyamañjūṣā.

Noteworthy among the substances mentioned in the guṇadoṣaprakaraṇa are:²⁹³ ādityapatrā (185), four types of ahiphena (4: śveta-, kṛṣṇa-, pīta-, citravarṇa), āhulī (92),²⁹⁴ ājavalla and sugandhājavalla (6), akalkara (2),²⁹⁵ two types of ākhukarṇī (12: bṛhat- and laghvī ākhukarṇī), alitā (4), allaka (11),²⁹⁶ several types of ālu (5: madhurā-jāluka, raktarājāluka, rājālubheda, śvetālu, kṛṣṇāluka, kṛṣṇavanāluka, kāṃsyāluka), four types of āmalakī (9: āmalakī, laghudhātṛī, parṇāmalaka, rāyāmala), amaruphala (2), amlaparnī (6),²⁹⁷ āmlavallī (53),²⁹⁸ three types of apāmārgaka (8: śveta-, rakta-, toyāpāmārgaka),²⁹⁹ argata (5),³⁰⁰ three types of ativiśā (4: śuklā, kṛṣṇā, aruṇā), two types of babbūla (138: babbūla and laghubabbūlaka), bāṇbī (138), bhṛṅgāhvā (142),³⁰¹ bhṛṅgamārī (142), bhūmidruma (106), bhūmīśiraḍikā (178), bhūmitanayā (93), two types of bimbī (103: bimbikā and tiktābimbī), two types of bola (140: rakta and kṛṣṇa), brahmarākṣasaka (169), four types of campaka (81–82: suvarṇa-, nāga-, śveta-, bhūmicampaka),³⁰² candraśūra (11), candrusa (86), cillikā (84), four types of cillī (82: śveta-, rakta-, śunacillī, cillībheda), coravallī (84), devadārī (106), devakumbhā (63), devanala (106),³⁰³ two types of doḍī (107: doḍī and viśadoḍī), dvīpāntaravacā (84), ekāṅgī (16),³⁰⁴ ekavīrā (15), gandhapātrā (187), gaṅgāvatī (77), ghoḍekātharikā (80), three types of gholikā (80: gholikā, rājagholikā, kṣudragholikā),³⁰⁵ godhūmī (129), gometha (77), gonasī (80), gopīcandanaka (76), gulghaṇṭikā (80), five types of hayārī³⁰⁶ (46: śveta, rakta, pāṭala, pīta, kṛṣṇa), herambavṛkṣa (188),³⁰⁷ hulī (93), four types of jambū (87–88: jambū, rāja-, kṣudra-, jalajambū), jhiṇjhurdī (91), kācā (60), six types of kadālī (51: kadālī, aranya-, kāṣṭha-, suvarṇa-, mahīṣīkadālī, kṛṣṇā kadālī), kājūtaka (60),³⁰⁸ two types of kākaḍa (60: bṛhat- and laghu-), kakundara (62), three types of kāñcana (55–56: rakta, śveta, pīta), two types of kāṇḍavallī³⁰⁹ (56: caturdhārā and tridhārā), karambī (53), six types of karañja (46: karañja, mahā-, ghṛta-, guccha-, pūtīkarañja, kaṇṭayukta karañja), four types of kāravella (58–59: kāravella, bṛhat-, jalāja-, vanajakāravella), karavīraṇī (54), five types of karkaṭī (57–58: karkaṭī, dvitīyā karkaṭī, aranyakarkaṭī, tiktakarkaṭikā, cīnā karkaṭikā),³¹⁰ several types of karpūra (54–55: karpūra, tīśāvāsa, himakarpūra, potāśraya, udayabhāskara, parṇakarpūra, bāṇāsūrapure jātaḥ), three types of kaṭabhī (52: kaṭabhī, kṣudrā and kṛṣṇā kaṭabhī), kaṭūdārī (174), kaṭukandārikā (53),³¹¹ kaṭuvallī (53),³¹² kemukā (64),³¹³ kenā (65), six types of khadira (69–70: raktasāra and śvetasāra khadira, viṭkhadira = arimeda, raktārimeda, laghukhadira, vallīkhadiraka), seven types of kharjūrī (68–69: kharjūrī, piṇḍa-, bṛhat-, madhukharjūrīkā, bhūkharjūrī, dvīpāntarasthā and bṛhaddvīpāntarasthā kharjūrī),³¹⁴ two types of kharsambalī (69: raktā and kṛṣṇā), koṣimbavṛkṣa (66–67),

kṣudrakāralikā (54), two types of kukkuṭaka (62: kukkuṭaka and devakukkuṭaka),³¹⁵ kukkuṭapādī (63), kulayī (63), kuṇkumāgaruka (86), two types of kuraṇḍikā (62: kṣudra- and br̥hatkuraṇḍikā), laghurāḥagira (168), two types of lajjālu (171: lajjālu and laghulajjālu), lāṅka (112),³¹⁶ makhāna (144), makṣeṣikā (144), mañcapattrī (163), five types of māriṣa (151–152: rakta-, haridrakta-, amla-, jalamāriṣa), mā-yāphala (152), māyinī (152), motirīṅganikā (92), mūṣakāri (12), three types of nāgavallī (116: nāgavallī, a samudratīrajā and a vṛkṣajā type), nakulavallikā (159), two types of nārikela (118: nārikela and mohajāṭiyaka nārikela), nimbārā (121),³¹⁷ pāṇḍuraphalī (129),³¹⁸ parenī (124), parvakāṣṭha (181), parvara (123),³¹⁹ five types of pātālā (128: śveta-, rakta-, kṣudra-, bhū-, vallīpātālā), paunarnavī (132), pedrubodā-raka (133), piṇḍīra (133),³²⁰ four types of pippalī (130: pippalī, saṁphalī, markatī, vanasthā pippalī), pudina (132),³²¹ several types of pūgaphala (184: āndhrodbhava, campāvatiḥbhava, rotasañjña, valgulagrāmaja, candāpurabhava, guhāgarodbhava, nailāvatagrāmaja), rājāmṛataka (92), raktā hūlī (93), two types of rāmabāṇa (168: rāmabāṇa and br̥hadrāmabāṇa), rāmaphala (168),³²² rāmasāli (8), two types of sacintikāphala (185: sacintikāphala and mahāsacintikāphala), sājaka (115), śākinī (133), sālimkanda (183), samudraśoṣa (181),³²³ segrudī (183), sītāphala (183),³²⁴ suramāḍa (141), two types of sūraṇa (185: sūraṇa and lohitasūraṇa), surapattī (184), suraputrī (185), śvetāṅgulīphalā (80), tamākhu (103), tejonmantha (16),³²⁵ teraṇā (99), tiktairāṇḍa (90), tiktakaṇḍikā (67), trikāṇḍa (98), several types of tṛṇa (71–72: iṅṣudarbhā,³²⁶ gomūtrikā,³²⁷ aśvala, śilpikā,³²⁸ niḥśreṇī,³²⁹ jaraṭī,³³⁰ majjara,³³¹ mṛṅgapriya, veṇupattī, manthānaka,³³² kundaru, caṇika,³³³ śūlitṛṇa, lavaṇatṛṇa,³³⁴ paṇyandhaka,³³⁵ asitapattra),³³⁶ tṛṇakeśāraka (64), five types of tulasī (98–99: śvetā, kṛṣṇā, āraṇya-, kṣudrā āraṇya-, sugandhāraṇyatulasī), tuvaraka (98), three types of udumbara (12: udumbara, nadyumbara, kākodumbarikā), two types of upodakī (144 and 175: upodakī³³⁷ and pr̥thivyupodakī), uttarāṇī (13), vajrabhr̥ṅgī (75),³³⁸ two types of vaṇīśa (174: vaṇīśa and randhravaṇīśa), vanaśopā (180), vātakumbhaphala (133), veṇukāśa (139), two types of vetra (175: vetra and br̥hadvetra), two types of vṛntāka (173: vṛntāka and br̥hadvṛntāka), vṛṣāṅka (139), yaṣṭikāśvā (61), and three types of yavānī (16: yavānī, pārasīkayavānī, khurāsānī yavānī).

The pāradaprakaraṇa describes sixty-four rasauśadhis, used in the bandhana of mercury (480–481).³³⁹

Special features found in volume two are: verses on karmavipākā are present at the beginning of many chapters; verses of an astrological character are less frequently met with;³⁴⁰ the use of mantras is not uncommon.³⁴¹

One series of thirteen saṁpipāta fevers is described, together with their treatment: sandhika, antaka, rugdāhaka, cittabhrama, śītāṅga, tandrika, kaṇṭhakubja, karṇaka, bhugnanetra, raktaśhīvin, pralāpaka, jīhvaka, and abhinyāsa (42–59);³⁴² the fevers called hādrakra (60) and mantharajvara or madhuraka (102–103)³⁴³ are also described; the section on vātavāyādhī mentions jṛmbhā (401), pralāpa (401), rasājñāna (401), tvakśūnyatā (402), mūtranigraha (421–422), kaṭivāta or -śūla (423), ūrdhvavāta (423–424), and trikaśūla (424–425);³⁴⁴ bahumūtra is dealt with in the section on prameha (586); the section on udara mentions śothodara (606–607); the section on aṇḍavṛddhi has also verses on vardhma (622–623) and kuraṇḍaka

(623–624); burns (agnidagdhavaraṇa) are dealt with in the section on āgantukavaraṇa (660–663); verses on sparsāvāta are found in the section on śītapitta (710–711); seven types of śītalā are described in the section on masūrīkā (730–732), which has also incorporated the hymn to Śītalā, called śītalāṣṭaka; the section on pradara describes somaroga and mūtrāsīsāra (833–834); the section on garbhīṇīroga includes recipes aiming at garbhasthīrīkaraṇa, i.e., the prevention of miscarriages and immature births (841–842); the section on mūdhagarbha contains, among other things, abortifacient (garbhapātana; 848) and contraceptive formulae (garbhanivāraṇa; 850); the section on children's diseases describes the disorder called utphullikā and contains, at the end, a portion resembling the Kumāratantra;³⁴⁵ the last two sections are concerned with snāyukaroga (dracontiasis) and potavidhi.³⁴⁶

No particulars are known to me about Viṣṇu Vāsudeva Goḍbole.

NIGHAṆṬUSAMGRAHA,³⁴⁷ completed in 1893, written by Raghunāthajī Indrajī of Jūnāgarh, assisted by Jayakṛṣṇa Indujī. Since the author was generally known under the name of Katobhaṭṭa, this nighaṇṭu is often called Katobhaṭṭanighaṇṭu.³⁴⁸

The Nighaṇṭusamgraha describes more than 600 medicinal substances and gives their names in ten languages. The work is said to contain a wealth of information, based on both earlier treatises and the author's own experience.

Sources used by Raghunāthajī are: the Bhāvaprakāśanighaṇṭu, Dhanvantarīyanighaṇṭu, Lolimbarāja's Vaidyajīvana, the Madanapālanighaṇṭu, Moreśvara's Vaidyāmṛta, Śivadatta's Śivakośa, the Soḍhalanighaṇṭu, and the Nighaṇṭuratnākara. The descriptions of many plants new to the Indian pharmacopoeia were taken from the Nighaṇṭuratnākara.

The Nighaṇṭusamgraha is quoted in the Śāligrāmanighaṇṭubhūṣaṇa of the Brhannighaṇṭuratnākara and by P.K. Warriar, V.P.K. Bhambar and C. Ramankutty in their 'Indian medicinal plants' (1994–1996).

Raghunāthajī was the middle one of the three sons of the astrologer Indra who lived in Jūnāgarh in Saurāṣṭra; Indra was the eldest son of the astrologer Murāri who resided at Saudāmāpurī, the modern Porebunder in Saurāṣṭra.

Raghunātha, a Praśnorā Nāgara brāhmaṇa by caste,³⁴⁹ was a pupil of the Praśnorā brāhmaṇa Viṭṭhalabhaṭṭa of Jāmnaṅgar. The well-known Bhagavanlāl Indrajī, who was an expert in old Indian scripts, was Raghunātha's elder brother.³⁵⁰

PARIBHĀṢĀ by Gaṅgādhara.³⁵¹

PARYĀYAMUKTĀVALĪ, written by Gopīmohanakavirāja.³⁵² This work is a small treatise which enumerates the names of a number of medicinal substances, divided into twenty-one groups (varga): karpūrādisugandhivarga, jīrakādimadhyagandhivarga, karkaṭākhyādihinagandhivarga, ahīphenādisārajavarga, māṇikyādiratnavarga, dhātupadhātuvarga, drākṣādīmadhuravarga, dāḍīmādyamlavarga, jīvantyādyuttamaśākavarga, pāthādītiktaśākavarga, jātyādīpuṣpavarga, kuṣmāṇḍādīlatāphalavarga, kaṣerukādīkandavarga, nyagrodhādīmahāvṛkṣavarga, nandīvṛkṣādīhrasvavṛkṣagaṇa, dūrvādīhrasvavṛkṣagaṇa, tāmbūlādīlatāvṛkṣagaṇa, hareṇvādīśīmibdhānyaśūkadhānyavarga,

śyāmākādītṛṇadhānyavarga, bhaktādikṛtānavarga, and pānīyavarga.

A similar arrangement is found in Hemacandra's Nighaṇṭuśeṣa and Haricaraṇasena's Paryāyamuktāvalī.

Sources are not mentioned, but the author refers in the introductory verses to a koṣa by Mādhavakara.

Interesting substances mentioned are: aguru and kṛṣṇāguru (2); ahīphena (13); four types of candana (śrīkhaṇḍa, śvetacandana, haricandana, kālīyaka; 2), to which raktacandana (12) and kucandana (13) have to be added; jalakandā kadalī (42); jayapāla (47); two types of kalambī (kalambī and kṛṣṇapallavā; 29); kuliñja (8); kumaricaka (30); madhuniṣpāva (55); mahākadamba (36); pītarohiṇī (9);³⁵³ śakraśana (31),³⁵⁴ sarpakaṅkālīkā (54); śīrāmālaka (26).

PATHYĀPATHYA by Gaṅgādhara.³⁵⁵

PRAYOGACANDRODAYA by Gaṅgādhara.³⁵⁶

RĀMACANDRIKĀ, a compilation on the treatment of various diseases, probably written by Rāmacandra, son of Kāśīnātha. The subject of karmavipāka is also dealt with, based on works like the Brahmagītā,³⁵⁷ Brahmapurāṇa, Maheśvaratantra,³⁵⁸ Padmapurāṇa, etc. The MS of this treatise may date from the nineteenth century; the compilation itself is probably not much earlier.³⁵⁹

ROGAPARĪKṢĀ, compiled by Gaṇeśa Harī Śeṣaḍe.³⁶⁰

(SADVAIDYA)BHĀVĀVALĪ by Jagannāthagupta, son of Śivanātha: biographies of physicians in Senahātī.³⁶¹

(SADVAIDYA)KULACANDRIKĀ by Dvārakānātha Dāsa Gupta: a work on the Vaidya families of Bengal that forms a supplement to Rāmākānta Dāsa's Sadvaidyakulapañjikā.³⁶²

SADVAIDYAKULAPĀÑJIKĀ, a genealogy of the Vaidya caste, written in verse, by Kavikaṇṭhahāra Rāmākānta Dāsa,³⁶³ who was the teacher of Gaṅgādhara Kavirāja.³⁶⁴

ŚĀLIGRĀMAUṢADHAŚABDASĀGARA³⁶⁵ or Āyurvedīya Auṣadhikoṣa by Śāligrāma:³⁶⁶ a medical lexicon, arranged according to the order of the Sanskrit alphabet, with short explanations in Sanskrit and with Hindī synonyms.

ŚAMKARĀKHYA,³⁶⁷ Śaṅkaraśata,³⁶⁸ or Vaidyakaśāraśaṅkarākhyā,³⁶⁹ a work by an author called Rāma.

The treatise³⁷⁰ consists of 171 verses, arranged in six chapters. Chapter one (1–39), which contains a table of contents (2), deals with the messenger (dūta; 3–4), astrology connected with medicine (5–14), curability and incurability (15–16), the examination of the pulse and the urine (18–22), the symptoms of the excited doṣas (23–30), and types of patients that should or should not be treated (31–39). Chapter two (40–50) is

about general therapeutic measures (sneha, dāgha, vamaṇa, recana, taila, ghṛta, nasya). Chapter three (51–95) and four (96–105) are chiefly concerned with the symptoms and treatment of fever and diarrhoea. Chapter five (106–157) gives prescriptions for a variety of diseases. Chapter six (158–171) contains prescriptions against some diseases and a few verses on inauspicious astrological yogas.

Rāma quotes in his work the Śārṅgadharasaṁhitā (104–105).³⁷¹

A disease called kūrma is described (161–165).

The author mentions his name as Rāma (1), without giving any more information.

The work was completed in 1896/97.³⁷²

ŚARABHENDRAVIDYARATNĀVALĪ. This work, in Marāṭhī, consists of a collection of recipes, made on the request of or written by one of the Maratha kings of Tanjore, Sarabhoji (or Serfoji) II (A.D. 1798–1832),³⁷³ who established a medical institution, called Dhanvantari Mahāl, where both English and Indian physicians harmoniously worked together.³⁷⁴ A Tamil version of this treatise has been published.³⁷⁵ The same king ordered a very large collection of tested recipes to be made.³⁷⁶

SĀRAKAUMUDĪ, compiled by Vasantakumāra Rāya.³⁷⁷

SIDDHABHĒṢAJAMANĪMĀLĀ,³⁷⁸ composed by Kṛṣṇarāma.

The treatise consists of 1,864 verses in various metres,³⁷⁹ composed by the author. It is divided into five sections (gucchaka). Section one (upodghāta; 22 verses) contains the genealogy of the author. Section two (harīṭakyādivarṇaṇa; 316 verses) consists of a nighaṇṭu, which enumerates the properties of medicinal substances, articles of food, and prepared dishes. Section three (153 verses) deals with the preservation of health (svāsthyasaṁrakṣaṇaprakaraṇa; 1–56), the six tastes and their combinations (rasādibhedaprakaraṇa; 57–64), prognostics (dūtādīprakaraṇa; 65–97), wonderful tales arousing the interest (kautuka, camatkāra) of patients and distracting them (muktakasaṁgraha; 98–127), and fireworks (khaḍhūpavarṇaṇa; 128–153).³⁸⁰ Section four (1,180 verses) is exclusively devoted to the treatment of diseases.³⁸¹ Section five (193 verses) is concerned with iatrochemistry (rasādīprakaraṇa) and aphrodisiacs (vājīkaraṇaprakaraṇa).

The prescriptions in section four are of both an āyurvedic and iatrochemical character. The types of pharmaceutical preparation called śārkara³⁸² and arka³⁸³ are not uncommon. Magical and religious ways of treatment are also met with.³⁸⁴

The names of relatives, colleagues and pupils who transmitted particular formulae to the author are often explicitly mentioned. These names are: Ādityarāma (4.435 and 1029),³⁸⁵ Āśamayogin (4.226),³⁸⁶ Bālamukunda (4.997),³⁸⁷ Chagana (4.170),³⁸⁸ Cimana (4.916), Dāmodara (4.692),³⁸⁹ Ghanaśyāma (4.471), Jīvanātha (4.1116),³⁹⁰ Jugaladāsa (4.339), Karuṇāśaṁkara (4.1166),³⁹¹ Mahādeva (4.437),³⁹² Raghunātha (4.767), Sadānanda (4.357),³⁹³ Śambhudatta Sārasvata (5.52–53),³⁹⁴ Śyāma (4.186),³⁹⁵ and Śyamarāma (4.514). Sometimes Kṛṣṇarāma refers to his grandfather (4.11 and 283) or his guru (4.338, 663, 746). In other instances he does not reveal the name of the person who passed down a recipe (4.796–797 and 897).

A few sources only are mentioned by name: the *Bṛhatrayī* (3.94; 4.4) and *Laghu-trayī* (3.94), the *Jayapuramelakakutukākāvya* (3.136),³⁹⁶ and the *Sandhānapaddhati* (2.220). The *saśrutāḥ* are referred to once (4.732).

The *Siddhabheṣajamaṇimālā* is quoted in the *Bheṣajasamhitā*, the commentary on the *Siddhabhaiṣajyamañjūṣā*, *Devasiṃha Viṭṭhal's* *Bṛhadāsavarīṣaṅgraha*, *Guḷrā-jśarmamiśra's* commentary on the *Āyurvedaprakāśa*, *Guḷrāśarmamiśra's* *Siddhaprā-yogalatikā*³⁹⁷ and *Viśikhānupraveśavijñāna*, *Hariprapanna's* *Rasayogasāgara*, *Hari-śaraṇānanda's* *Kūpīpakvarasanirmānavijñāna*, and *Yādavaji Trikamji Ācārya's* *Rasā-mṛta* and *Siddhayogasāṅgraha*.

Kṛṣṇarāma's views³⁹⁸ on the actions of drugs have been influenced by *Keśava's* *Siddhamantra*; their effect on the *doṣas* is considered their most basic characteristic (2. 1–17). The arrangement of the diseases in section four is for the greater part in agreement with the *Mādhavanidāna*. The following chapter-headings are absent: *krimi*, *tr-ṣṇā*, *pānātaya*, *vātarakta*, *ūrustambha*, *āmavāta*, *hṛdroga*, *medoroga*, *ślīpada*, *vidradhi*, *śūkadoṣa*, *amlapitta*, *visarpa*, *visphoṭa*, and *masūrikā*. A chapter on *snāyukaroga* (4. 882–894) has been added; *vardhma* is dealt with in the chapter on *vṛddhi*; *phiranga* is mentioned in the chapter on *vātavyāñhi* (4.779).

Noteworthy names of diseases are: *mauktikajvara* (4.20 and 21),³⁹⁹ *gaurjarī* (4. 319),⁴⁰⁰ *śūnyavāta* (4.463–466),⁴⁰¹ *nalabandhasamīra* (4.607),⁴⁰² *saujāka* (4.731, 772, 781, 785, 798, 807, 810, 812, 815),⁴⁰³ *śūkadoṣa* (4.914),⁴⁰⁴ *prṣṭhavisphoṭa* (4.925),⁴⁰⁵ *challaka* (4.935),⁴⁰⁶ *cepya* (4.998),⁴⁰⁷ *utphullikā* (2.298; 4.1137, 1140, 1143),⁴⁰⁸ and *darbha* (4.1145).⁴⁰⁹

A rare type of pharmaceutical preparation is called *phalāspā* (4.51–54),⁴¹⁰ New substances prescribed by the author are ice (*kṛtrima hima*; 4.207 and 1070) and soap (*sābu*; 4.219, 616 and 926).

Noteworthy medicinal substances are: *akīka* (2.303),⁴¹¹ *amarūdā* (2.155),⁴¹² *ambara* (2.113),⁴¹³ *attara* (2.149),⁴¹⁴ *bābūnā* (4.52),⁴¹⁵ *banapsā* (2.55),⁴¹⁶ *cirapotikā* (2.56),⁴¹⁷ *cobacinī* (4.477; 5.151), *dhūmavallī* (4.373),⁴¹⁸ *dvīpāntariya cūkaka* (4.227),⁴¹⁹ *dvīpāntariyavaṭa* (4.620),⁴²⁰ *dvīpāntariyavṛkṣāmla* (4.400 and 424),⁴²¹ *elaciṭphala* (2.157),⁴²² *gambhīrī* (4.450),⁴²³ *gaṇḍagātra* (2.156),⁴²⁴ *gañjā* (4.914), *ghṛtāśman* (4.943),⁴²⁵ *gilaramanī* (4.985),⁴²⁶ *gucchaughapuṣpa* (2.131),⁴²⁷ *gundaṇī* (4.313),⁴²⁸ *haṃsarāja* (4.830),⁴²⁹ *iśvarabola* (2.41),⁴³⁰ *jaṅgāla* (4.204 and 684),⁴³¹ *jarīṣka* (4.24),⁴³² *jāvintrikā* (2.122),⁴³³ *jīrāvana* (4.52),⁴³⁴ *jūphikā* (4.322 and 329),⁴³⁵ *kabābacinī* (2.124),⁴³⁶ *kaharavā* (4.782),⁴³⁷ *kakeraka* (4.713),⁴³⁸ *kalā* (4.14),⁴³⁹ *kālāñjanī* (4.581),⁴⁴⁰ *kālāñjanikā* (2.64),⁴⁴¹ *kalasora* (4.292, 363, 787, 936),⁴⁴² *kalvañjī* (4.262),⁴⁴³ *kalvañjikā* (2.40),⁴⁴⁴ *kāmālikā* (4.419),⁴⁴⁵ *kaselikā* (2.106),⁴⁴⁶ *kāsinī* (2.45),⁴⁴⁷ *kaṭīragundraka* (4.779),⁴⁴⁸ *kaṭola* (4.905),⁴⁴⁹ *kattha(ka)* (4.159, 826),⁴⁵⁰ *kaṭīragundra* (2.134),⁴⁵¹ *kaukkuramārkava* (4.240),⁴⁵² *kṛṣṇabīja* (4.599),⁴⁵³ *kṛṣṇagundra* (4.567 and 1091),⁴⁵⁴ *lohabāṇa* (2.132; 4.435; 5.105),⁴⁵⁵ *mamiṛa* (2. 66),⁴⁵⁶ *mañju* (4.769, 977, 980),⁴⁵⁷ *marālapadikā* (2.82),⁴⁵⁸ *mastakīgundra* (2.134),⁴⁵⁹ *mṛtāśman* (4.693),⁴⁶⁰ *nara* (4.557 and 722),⁴⁶¹ *paṭagrāhitṛṇa* (4.236),⁴⁶² *pittakārīṇī* (2.38),⁴⁶³ *pradaradārīṇī* (4.1079–1081),⁴⁶⁴ *pradīna* (4.423),⁴⁶⁵ *rādhagālī* (4.493),⁴⁶⁶ *rājaśaṇikā* (4.1069),⁴⁶⁷ *raṅgavarata* (4.980 and 985),⁴⁶⁸ *ratnajyotis* (4.620),⁴⁶⁹ *revatī* (4.646 and 1107),⁴⁷⁰ *revatikā* (2.62),⁴⁷¹ *sābbūdāna* (2.179),⁴⁷² *sābu* (4.219 and

926),⁴⁷³ sābuna (4.616),⁴⁷⁴ sahasradru (4.812),⁴⁷⁵ sahasrapuṣpa (4.1173),⁴⁷⁶ sahasra-
suma (4.229),⁴⁷⁷ sālima (2.104; 4.52 and 779),⁴⁷⁸ sanāmakī (2.63),⁴⁷⁹ śarkarākanda
(4.493),⁴⁸⁰ śatamalla (2.294),⁴⁸¹ śavagrāvan (2.299),⁴⁸² śavāśman (4.205 and 825),⁴⁸³
śavopala (4.713),⁴⁸⁴ sauraka (4.536 and 790),⁴⁸⁵ soraka (4.533),⁴⁸⁶ suma (4.343, 638,
701),⁴⁸⁷ sumakanda (4.14),⁴⁸⁸ svādusurañjāna (4.352),⁴⁸⁹ tarbūja (2.153),⁴⁹⁰ tejo'mbu
(4.368),⁴⁹¹ todari (2.105),⁴⁹² unnābha (4.317),⁴⁹³ usabbā (4.477),⁴⁹⁴ vajradantī (4.
222),⁴⁹⁵ vajrakadhānya (4.623 and 676),⁴⁹⁶ vīkā (4.698 and 1067),⁴⁹⁷ viṣakharpara
(4.457),⁴⁹⁸ and viṣanārikela (4.1129).⁴⁹⁹

The name of the author appears at several places of his work as Kṛṣṇa (1.5; 5.189),
Kṛṣṇakavi (1.22; 4.1180; 5.193), Kṛṣṇarāma (4.2), Kṛṣṇākhyā Vyāsa (4.4), and Kṛṣṇa-
śarman (5.190). He was born in 1848/49 and died in 1897/98. His teachers were Jī-
vanātha, Candanādāsa, and his father (5.190). The Siddhabheṣajamaṇimālā was writ-
ten for Mādhava, ruler of Jayapura (1.13; 5.189), who descended from Rāma, Jayasiṃ-
havarman, and Māna (1.6–9).

Kṛṣṇarāma was a prolific writer,⁵⁰⁰ who wrote the following fourteen works:
Āryālaṃkāraśataka, Chandoganīta, Gappasamādhāna, Gopālagītā, Holāmahotsava,
Jayapuramelakakutuka, Jayapuravilāsa, Kāśīnāthastava, Mādhavapāññigrahotsava,
Mukta-
kamuktāvalī, Palāṇḍurājaśataka, Sāraśataka, Siddhabheṣajamaṇimālā, and Vi-
dvadvaidyatarangīnī.⁵⁰¹

Kṛṣṇarāma's father was Kundana (1.4) or Jīvanarāma, who lived from 1828/29 to
1880/81; he was the author of a work on Yūnānī medicine, called Hikamanmandā-
rabandha (1.4).⁵⁰² Kṛṣṇarāma's grandfather was Lallurāma (1.3) or Viṣṇurāma, who
lived from 1798/99 to 1873/74.⁵⁰³ His great-grandfather was Lakṣmīrāma, who was
born in Ahmedābād, but became the court physician of Pratāpasīṃha of Jayapura
(1778–1803).⁵⁰⁴

The Siddhabheṣajamaṇimālā was completed in 1896/97 (5.192).⁵⁰⁵

A useful Sanskrit commentary (tippanikā) on the Siddhabheṣajamaṇimālā was written
by Lakṣmīrāma (1873–1939), one of Kṛṣṇarāma's pupils.⁵⁰⁶

Sources, referred to or quoted by name by Lakṣmīrāma, are:⁵⁰⁷ Amara (2.181,
222; 3.34; 4.38, 212, 671), Amaratīkā (2.116), Aruṇa (2.39), Aruṇadatta (2.170),
Aṣṭāṅgahrdaya (3.75), Āyurvedasāyana (2.281),⁵⁰⁸ Bhaṭṭi (2.315; 3.128),⁵⁰⁹
Bopadeva (2.281),⁵¹⁰ Brahmavaivartapurāṇa (2.263), Candrikākāra (2.257), Caraka
(2.257, 281, 287; 3.2, 68, 98; 4.1; 5.92), Cintāmaṇi (2.263), Darpaṇa (3.129),
Dhanapati (2.178, 242), Hemādri (2.257), Holāmahotsava (2.148),⁵¹¹ Jayapuravilāsa
(4.1116),⁵¹² Kośa (2.78, 97, 247; 4.728; 5.99, 131), Kumārasaṃbhava (2.245),
Mādhava (2.2, 230),⁵¹³ Māgha (2.23, 132), Maheśvara (2.81), Manthānabhairava
(2.1), Mantrakalpadruma (3.103),⁵¹⁴ Merutantra (2.179), Muktakamuktāvalī (2.148;
3.36),⁵¹⁵ Nāḍīprakāśa (3.71), Naisadhīya (2.23), Nighaṇṭu (2.192; 4.914; 5.32),
Nighaṇṭusāra (2.148, 294), Nighaṇṭuviśeṣa (2.113), Palāṇḍurājaśataka (2.240,
243),⁵¹⁶ Pañcatattvaparakāśa (3.145),⁵¹⁷ Patākāgrantha (3.62),⁵¹⁸ Rabhasa (2.28),
Raghuvamśa (5.30), Rājanighaṇṭu (2.78), Rasaratnasamuccaya (5.2, 19), Rasaśāstra
(5.7, 11), Ratnamālā (2.132), Rugviniścaya (4.133, 882), Śabdārthacintāmaṇi (2.97,

211, 296; 3.128), Siddhamantraprakāśa (2.17), Siddhasāra (2.204), Suśruta (2.1, 257, 281; 3.2, 12, 38; 5.92), Vāgbhaṭa (2.27, 201, 249; 3.15, 79; 4.9, 133, 134), Vāpyacandra (2.243), Vaśiṣṭha (2.169), Vidagdhamukhamāṇḍana (4.16, 49),⁵¹⁹ Vijñāneśvarabhaṭṭāraka (2.211),⁵²⁰ Vṛnda (4.882), Yājñavalkya (3.20), Yāvana Nighaṇṭuviśeṣa (2.113), Yogaratnākara (2.109), and Yogasudhānidhi (2.298).⁵²¹

Lakṣmīrāma is mentioned in Guṛjārśarmamiśra's Siddhaphayogalatikā.⁵²²

A Hindī commentary, called Maṇicchatā, on sections four and five of the Bheṣajamaṇimālā, was written by Devendraprasādhapaṭṭa, a great-grandson of Kṛṣṇarāma.⁵²³

SUKHASĀDHAKA by Parameśvara.⁵²⁴ This work is said to be based on the Hṛdayapriya by the same author.⁵²⁵

SŪPAŚĀSTRA, a work on the culinary art, by Bhīmasena.⁵²⁶

TĀMBŪLAMAÑJARĪ,⁵²⁷ an anonymous collection of verses on betel chewing,⁵²⁸ compiled from many sources.

The treatise describes the beneficial medicinal effects of betel (tāmbūla) leaves (1–2), the thirteen qualities of tāmbūla (3),⁵²⁹ when to chew betel (4–6), the proportions of the ingredients of a quid (7–11), the bad effects when the proper ratios are not observed (12–18), rules for chewing (19–23), the deities presiding over the various parts of a betel leaf (24–25), rules for handling a quid (26–31), the number of leaves to be presented to particular classes of persons or relatives (32–39),⁵³⁰ rules (40–52), the ingredients of a chew (53–59), rules (60–62), the beneficial effects of chewing (63–64), classes of persons who should avoid chewing betel (65–72), the ingredients again (73–75), rules (76–78), and the properties of the leaves of the betel plant grown in various countries (79–88).⁵³¹

The remaining part of the treatise is devoted to the other ingredients and diverse substances that can be added to a quid: the betel nut (pūga; 95–113), lime (cūrṇa; 114–116), tobacco (tamākhu; 117), khadirasāra (118–124), kastūrī (125–142), latākastūrī (143), gold foil (suvarṇadala; 144–145), silver foil (raupyadala; 146–147), almonds (vātāma; 148–149), kaṅkola (150–152), kunkuma (153–161), mace (jātipatrī; 162–165), nutmeg (jātīphala; 166–169), small cardamoms (sūksmāilā; 170–174), cloves (lavanāga; 175–178), ginger (śuṇṭhī and ādraka; 179–180), sandal (candana; 181–188), coconut (nārikela; 189–194), tvac (195–200), and camphor (karpūra; 201–223).

Glosses are found after verses 41, 113, 154, 200 and 219.

One verse (57) is in a regional language.

Sources quoted are: Acyuta (55),⁵³² Amaramālā (gloss ad 113),⁵³³ Bharadvāja (7), Cūḍamaṇi (50–53), Dhanvantari (3–5),⁵³⁴ Dravyaguṇanighaṇṭu (117), Hemādri (gloss ad 41), Rājanighaṇṭu (9–11), Ratnamālā (93), Ratnamālāmañjarī (115),⁵³⁵ Trimallatīkā (8; gloss ad 219),⁵³⁶ Vaidyāmṛta (145),⁵³⁷ Vaidyaratna (60–62; 94), Vopadeva (54), Yogamālā (25), and Yogaratna (144; 147).

The sources of numerous verses are not specified, but many stanzas are from the Aṣṭāṅgasamgraha,⁵³⁸ Bṛhatsaṃhitā,⁵³⁹ Dhanvantarīyanighaṇṭu,⁵⁴⁰ Rājanighaṇṭu,⁵⁴¹

and *Suśrutasamhitā*.⁵⁴²

The quotation from *Acyutarāya Moḍak's Saubhāgyakalpadruma*⁵⁴³ points to the nineteenth century as the period of compilation of the treatise.

VAIDYABHŪṢAṆĀ by Bhīmasena.⁵⁴⁴

VAIDYADARPAṆA by Prāṇanātha, son of Kalyāṇabhaṭṭa. This work was composed in 1827.⁵⁴⁵ It is quoted in *Hariprapanna's Rasayogasāgara*.

VAIDYAHITOPADEŚA, written by Raghunāthaprasāda.⁵⁴⁶

VAIDYAKAŚABDASINDHU,⁵⁴⁷ by Umeśacandragupta,⁵⁴⁸ a medical lexicon, arranged according to the order of the Sanskrit alphabet. It refers to a large number of sources.

Umeśa and the *Vaidyakaśabdasindhu* are quoted in *Hazārīlāl Sukul's* commentary on the *Rasaratnasamuccaya*. The *Vaidyakaśabdasindhu* is quoted in *Somadeva-śarman's* commentary on the *Āyurvedaprakāśa*.

VAIDYAMUKTĀVALĪ, composed by Mauktika (Motīrāma), son of Māṇikyacandra and pupil of Rāmanātha. The work is provided with a commentary. Sources quoted are the *Bhāvaprakāśa*, *Hikmatprakāśa* and *Nāḍīprakāśa*.⁵⁴⁹

This treatise probably dates from the nineteenth century since the *Hikmatprakāśa* was completed in 1773/74 and the MS of the *Vaidyamuktāvalī* dates from 1851/52.⁵⁵⁰

VAIDYATATTVARATNĀKARA, compiled by Maganalāla Viśvanātha Vaidya.⁵⁵¹

VAIDYATATTVAVINIŚCAYA by Gaṅgādhara.⁵⁵²

VIDVANMANORANJANĪ, compiled by Padmalocana Nyāyaratna Bhaṭṭācārya.⁵⁵³

VĪRAHĀRALATIKĀ by Sāhibrāma, son of Dillārāma. The author wrote in 1845, at the request of Raṇavīrasīṅha, the *Vīrahāralatikā* as a commentary on the *Vīravaidyaratnahāra*. The latter work was translated from the Arabic either by Sāhibrāma himself or by Śāligrāma.

Sāhibrāma was a native of Kāśmīr and died in 1872. His other works are: *Lakṣyavedhana*, *Nītikalpalatā*, a commentary on the *Pañcasāyaka*, and *Vīraratnaśekharaśikhā*.⁵⁵⁴

VIṢAHARATANTRA by Gaṇeśa, son of Sabhācandra and a resident of Jammū. This work, a toxicological treatise, was completed in 1845, at the behest of king Raṇavīra Siṅha.⁵⁵⁵

Chapter 5

Twentieth-century authors and works

AGADATANTRAPRAKĀŚA, compiled by Gaḍādhara Vaidya Śarman.¹

AJĪRṆATIMIRABHĀSKARA² by Hakīm Caube Kyākhūbadāsa.³ This work, a monograph on indigestion (ajīrṇa), is written partly in Sanskrit verse, partly in Hindī prose. It is divided into four chapters. Chapter one (16 verses) describes the disorders of the digestive fire, bhasmaka included. Chapter two (12 verses) is about the six types of ajīrṇa, as distinguished by Mādhava; the characteristics of the pulse in disorders of the digestive fire are added. Chapter three (38 verses) describes what is beneficial (pathya) and harmful (apathya) in cases of ajīrṇa; it is, apart from some general therapeutic measures, especially concerned with a series of specific remedies against ajīrṇa caused by particular substances.⁴ Chapters four and five contain recipes,⁵ mostly (chapter four) or entirely (chapter five) in Hindī.⁶

The author was a son of the physician Caturvedaśaṃkaralāla,⁷ and lived, like his father, in Mathurā.⁸

ANUGRAHAMĪMĀMSĀ⁹ by Vaṭṭakkeppāṭu Nārāyaṇan Nāyar (1878–1959).¹⁰ This work, in six sections, deals with bacteriology and infectious diseases from an āyurvedic point of view. The author was of the opinion that the ancient Indian physicians were already acquainted with discoveries made with the aid of the microscope.

ANUPĀNADARPAṆA¹¹ by Jñārasarāmaśarman, a monograph on anupāna in 550 verses, arranged in nine chapters (pramoda).

Chapter one is on the vaidya, chapter two on āyurveda and its eight aṅgas, chapter three on weights and measures, and on the examination of the pulse. Chapter four (84 verses) is devoted to the anupānas to be prescribed along with various simple or compound drugs of an āyurvedic type, and chapter five (165 verses) to anupānas that have to be used in combination with rasaśuśadhas. Chapter six (63 verses) deals with the preparation of a number of compound drugs (mostly rasayogas), their actions, and their application in various diseases. Chapter seven (91 verses) is on alchemical subjects and describes the dhātus, upadhātus, ratnas, uparatnas, viṣas, and upaviṣas, together with their purification (śodhana) and killing (māraṇa). Chapter eight (55 verses) is about diverse types of bhasman, and chapter nine (28 verses) about disorders (doṣa) due to the ingestion of inorganic substances, and the alleviation (śānti) of these disorders.

Sources quoted are: *Bhaiṣajyasārāmṛtasaṃhitā* (5.18), *Bhāvaprakāśa* (3.7; 7.9, 26, etc.), *Gaurikañcālikātantra* (4.68), *granthāntara* (4.84; 5.5, 15–16, 45, 52, 66,

etc.), *Madanapālanighaṇṭu* (4.69–70; 8.42), *Rasendrapurāṇa* (5.97–98, 104, 132, 165, etc.), *Rasendrasārasaṃgraha* (5.3, 21–22; 6.24–25, etc.), *Śārṅgadharaśaṃhitā* (3.5; 4.55, 58, 74, 76–77, etc.), *Suśruta* (1.2–4, 6, 9, 2.3, etc.), *Vāgbhaṭa* (3.16; 4.50, etc.), (Lolimarāja's) *Vaidyajīvana* (3.17; 4.51, 72–73, etc.), and (Raghunātha's) *Vaidyavilāsa* (5.136).

The *Anupānadarpaṇa* is mentioned in Jñārasarāma's version of the *Amṛtasāgara* and was therefore written earlier than the latter work.

Jñārasarāma also wrote an *Anupānaratnākara*.

ANUPĀNAMAÑJARĪ, compiled by Puvvāḍa Sūryanārāyaṇa Rāvu.¹²

ANUPĀNARATNĀKARA by Jñārasarāma Śarman.¹³

ĀROGYĀMṚTABINDU or *Śītalāparihāra* or *Śītalārogāpahāra* by Jiyālāl, a treatise on śītalā (smallpox) and its treatment, written in Hindī prose, interspersed with Sanskrit quotations.¹⁴

The work is divided into three parts: (1) ākṣarīnidān and vaccination (1–99), (2) yūnāniyomkā siddhānt (99–104), (3) āyurvedokt śītalārog (104–147), followed by a nighaṇṭu or auśadhisvarūpavarṇana (147–173), a small section on substitutes (pratīdhi) (173–174), and information on the author (174–176).

Part one deals with the views of western medicine on smallpox and with vaccination, part two with the views of Islamic medicine. Part three discusses the āyurvedic views on masūrīkā and śītalā.

Authors and works quoted in the first half of part three are: *Brahmasaṃhitā* (3.1–3),¹⁵ *Bharadvāja* (3.4–10), *Bheḍa* (3.11–15), *Mādhavanidāna* (3.16–17), *Durgabhaṭṭa* (3.18–20), *Suśruta* (3.21), *Vaṅgasena* (3.22–26), *Śārṅgadhara* (3.27–29), and *Bhāvaprakāśa* (3.65–74). The second half quotes from the *Harīśarājanidāna* (3.2) and the *Kāśīkhaṇḍa* of the *Skandapurāṇa* (3.3–14).¹⁶

The Hindī prose of the first half of part three refers to the following works: *Bhāvaprakāśa* (3.22–26 and 29), *Brahmasaṃhitā* (3.1–3), *Mādhavanidāna* (3.22–26), and *Suśrutasaṃhitā* (3.1 and 22–26). The Hindī prose of the second half refers to: *Arkaprakāśa* (3.5), *Bheḍa* (3.9), *Brahmasaṃhitā* (3.1–2), *Cakradatta* (3.2), *Caraka* (3.1–2), *Kāmadhenupaddhati* (3.1–2),¹⁷ *Kanakavilāsa* (3.6 and 8), *Kāśīkhaṇḍa* (3.1–2), *Manoramā* (3.1–2), *Suśruta* (3.5), *Ṭoḍarānanda* (3.1–2), *Vaidyamahendī* (3.1–2),¹⁸ *Vaidyasarvasva* (3.1–2), *Vaidyarahasya* (3.3), *Vaṅgasena* (3.3, 7, 10, 12), and *Yogacintāmaṇi* (3.3).

The author, a Jain, of Agravāla varṇśa, was a son of Caudharī Sumerucand and a grandson of Caudharī Māṇīkcand. He was born in Pharrukhnagar in 1852.

ĀROGYASINDHU by Raṅganātha Sakhārāma Lāle, also called *Śukrasaṃhitā* and *Kā-maśāstra*, a work on sexual disorders.¹⁹

ĀSAVĀRIṢṬA by Satyadeva Vidyālaṃkāra.²⁰

ĀSAVĀRIṢṬASAṃGRAHA by Jagadīśaprasāda Garga.²¹

ĀSAVĀRIṢṬASAṃGRAHA by Pakṣadhara Jhā.²²

ĀSAVARIṢṬAYOGASAMGRAHA by Vayaskara N.S. Mooss,²³ a collection of 122 recipes of āsavaś and ariṣṭaś in Sanskrit, accompanied by a commentary in Malayāḷam.

ĀSAVAVIJÑĀNA by Hariṣaṇānanda.²⁴

AṢṬĀṄGAŚĀRĪRA by Vaidya Ratnam P.S. Varier (Vāriyar).²⁵ This work is an elaborate textbook on modern anatomy and physiology in 2,045 Sanskrit verses, arranged in eight chapters. A large number of new terms are found in it, which are explained in the author's commentary, called *Gūḍhārthabodhinī*. This commentary also gives the English equivalents of the newly introduced Sanskrit terms.

The author (1869–1944)²⁶ was the founder of the Ārogyavaidyasālā (Kottakal, Kerala).²⁷ He also wrote a *Bṛhacchārīra*.

AUṢADHAKRIYĀ, compiled by Śaṅkaraḷāla Hariṣaṅkara.²⁸

AUṢADHANIGHAṆṬU, a Sanskrit–Malayāḷam dictionary of nearly 30,000 names of drugs and medicinal plants, arranged in the order of the Sanskrit alphabet, compiled by Kāṇippayyūr Saṅkaran Nampūtirippāṭu in the beginning of the twentieth century. The author issued from a family of astrologers attached to the court of the king of Cochin.²⁹

AUṢADHIKRIYĀ, a compilation of prescriptions.³⁰

ĀYURVEDACANDRIKĀ or *Āyurvedīyaśabdārthanirṇāyako Bṛhadabhidhānagranthaḥ*, compiled by Haralāla Gupta, a dictionary of Sanskrit words with Bengali equivalents.³¹

ĀYURVEDACINTĀMAṆI, compiled by Baladevaprāsāda Mīśra, son of Sukhānandamiśra.³²

This work is a nighaṇṭu, enumerating synonyms and properties of medicinal substances, compiled from the *Carakasaṃhitā*, *Suśrutasaṃhitā*, the works of Vāgbhaṭa, the *Bhāvaprakāśa*, *Rājanighaṇṭu*, *Atriśaṃhitā*, *Rājavalḷabha*, *Vaidyakanighaṇṭu*, and other works.³³ It is divided into twenty-two vargas and describes 775 items. Almost all the substances are known from other treatises under the same or other names. Noteworthy among them are: ātṛpya (6.17),³⁴ bahunetra (6.20),³⁵ drauṇeya lavaṇa (1.96), sunepālī (6.48),³⁶ surapriya (2.40),³⁷ and śyāmaparṇī (19.13).³⁸

ĀYURVEDADARŚANA by Priyavrat Śarmā.³⁹ This work, in sūtra style, accompanied by a commentary in prose, deals with the philosophy of āyurveda.

Chapter one (prameyapāda; 31 sūtras): the definitions of āyus and āyurveda; prakṛti is the object of āyurveda; āyurveda is divided into sixteen branches;⁴⁰ sattva, ātman and śārīra are the subjects of āyurveda; sattva consists of antaḥkaraṇa, manas, buddhi and ahaṅkāra, and is characterized by prāṇa; the characteristics of the ātman; the characteristics of the body (śārīra); puruṣa is the combination of ātman and body; the five bhāvavikāras (stages of transformation) are: hetu, utpatti, vṛddhi, upaplava and viyoga;

the six accessory (tantropayogin) bhāvas are: dravya, guṇa, karman, samavāya, sāmānya, and viśeṣa; the definitions of these six accessory bhāvas; the five mahābhūtas; their specific properties; all substances and the body are composed of the five mahābhūtas; the functions of doṣas, dhātus and malas are based on the mahābhūtas; health and disease depend on the doṣas, which are of the nature of prāṇa; the natural functions of the three doṣas, vāta, pitta and kapha, are vikṣepa, ādāna and visarga; the dhātus, directed inwards (antarmukha), are supportive and nourishing; the seven dhātus; ojas is the essence of all the dhātus and the seat of prāṇa; the malas are devoid of essences (nihsāra), directed outwards (bahirmukha), and the causes of painful conditions (ābādha); agni performs pāka and is the causative factor in ādāna; among the bhūtvagnis, dhātuvagnis and annāgni, the first group is foremost; the constituents called srotas are pathways for the rasa, etc., and are of the nature of ākāśa; prakṛti consists of the predominance of a doṣa, present from birth onwards.

Chapter two (pramāṇapāda; 8 sūtras): the definition of pramāṇa; the four pramāṇas are āptopadeśa, pratyakṣa, anumāna and yukti; definitions of these pramāṇas; jñāna (knowledge), parīkṣā (examination) and prayoga (application) are the elements of medical procedures; adhyayana (study), adhyāpāna (teaching) and tadvidyasaṃbhāṣā (discussion with experts) are means for acquiring knowledge.

Chapter three (prakṛtipāda; 11 sūtras): prakṛti is the state of equilibrium (sāmya) and the source of vikṛti; the evolution of the universe (sarga) begins with avyakta and ends with the mahābhūtas; bondage (bandha) arises from saṃyoga, final liberation (mokṣa) from viyoga; the definition of prakṛti or svāsthya (health); the fourfold contact (yoga) is the cause of happiness and suffering; the foremost object (of medicine) is the protection of health in the healthy; this aim is reached by observation of the prescriptions; the rules concerning the maintenance of health (svasthavṛtta) relate to diet (āhāra), behaviour (ācāra) and activities (ceṣṭā); food, sleep and chastity are the secondary supports (upastambha) of health; those desiring longevity should have recourse to rasāyana; those desirous of progeny should have recourse to aphrodisiacs (vājīkaraṇa).

Chapter four (vikṛtipāda; 13 sūtras): a disorder (vikṛti) is (essentially) a state of disequilibrium (vaiśāmya); the material cause (upādāna) of vikṛti consists of the doṣas, the instrumental cause (nimitta) is formed by the aetiological factors; causes of disorders are aśātmyendriyārthasaṃyoga, prajñāparādha and pariṇāma; the stages of therapeutic intervention (kriyākāla) are six in number; a patient should be examined by means of the five senses and interrogation; knowledge about a disease is acquired by means of the nidānapañcaka; drugs should be examined (before use); therapy is the restoration of prakṛti; treatment is like a manual support (hastālamba); therapy is of three types; the attitude of a physician is fourfold; therapy consists of four limbs; a physician should be learned, experienced, pure and benevolent.

Authorities and works quoted or referred to in the commentary are: *Amarakoṣa* (1.6), *Bhagavadgītā* (3.1), *Bhāgavata* (3.10), *Bhāvaprakāśa* (1.19), *Cakradatta* (3.10), *Cakrapāṇi*, Candraśa's commentary on the *Cikitsākalikā* (3.4), *Caraka*, *Daḥaṇa* (1.2, 5, 23, 25, 29; 3.4), *Gaṅgādhara's Jalpakaḥpataṛu* (2.6), *Gītā* (1.23; 2.6; 3.3, 4), *Īśvara-kṛṣṇa* (3.2), *Kaṭhōpaniṣad* (1.6), *Madhukoṣa* (4.6), *Muṇḍakōpaniṣad* (3.6), *Nyāya* (1.5;

2.6), *Nyāyasūtra* (1.7; 2.2, 5; 3.2), *Praśnopaniṣad* (1.1), *Sāṃkhya* (3.2), *Sāṃkhyakārikā* (1.6), *Śāntarakṣita* (2.6), *Śārngadhara* (1.1 and 27; 4.5), *Sarvadarśanasamgraha* (3.3), *Siddhāntanidāna* (4.6), *Ṣoḍaśāṅgaḥṛdaya* (1.4), *Suśruta*, *Śvetāśvataropaniṣad* (3.2), *Tattvasamgraha* (2.6), *Vāgbhaṭa*, *Vaiśeṣika*, *Vijayarakṣita* (1.22; 4.2 and 6), *Vṛddhāvagbhāṭa* (1.29; 4.7), *Yāska's Nirukta* (1.10), *Yogarātnākara* (4.5), and *Yogīndranātha's Carakopaskāra* (2.6).

ĀYURVEDADARŚANA by Nārāyaṇadatta Tripañī.⁴¹ This work, written in 1,233 prose statements in sūtra style, arranged in sixteen chapters, and accompanied by an elaborate Sanskrit auto-commentary, called *Subodhinī*, is mainly concerned with the basic principles of āyurveda and their philosophical foundations; it also deals with anatomy, pathology, the general principles of treatment, and the processes (saṃskāra) to which mercury is subjected before being suitable to be administered as a medicine. The text and its commentary quote from numerous medical authorities, philosophical treatises, kāvyas, Purāṇas, etc. The author repeatedly advances his own views after referring to those of earlier authorities.⁴²

ĀYURVEDĀDARŚASAMGRAHA by Dāmodar Śarmā Gauṛ.⁴³

ĀYURVEDAPARIBHĀṢĀ, compiled by Paṇḍit D. Gopalacharlu.⁴⁴

ĀYURVEDARATNAMĀLĀ, compiled by Lokanātha Kaviratna.⁴⁵

ĀYURVEDASAMGRAHA by (Vāsiṣṭha) Gaṇapatiśāstrin, styled Kāvyaakaṇṭha. The author (18.11.1878–25.07.1936), son of Narasiṃhaśāstrin of Kalavarāyi village in Vizagapatam district, Āndhra Pradesh, was an adherent and pupil of Ramaṇa Maḥarṣi of Tiruvaṇṇāmalai.⁴⁶

ĀYURVEDASŪTRA by Rāmaprasāda Śarman is a short treatise in sūtra style, with a Sanskrit and Hindī commentary by the author. It deals, in forty-seven sūtras, arranged in three chapters, with basic āyurvedic concepts.⁴⁷ The author was the father of Paṇḍit Shiv Sharma.⁴⁸ He also wrote the *Rasendrapurāṇa*.⁴⁹

ĀYURVEDAUṢADHARATNĀKARA, compiled by Śrīpāda Kṛṣṇamūrti Śāstrin.⁵⁰

ĀYURVEDĪYA HITOPADEŚA,⁵¹ written by Raṇajitrāya Desāī,⁵² is a compilation from the *Caraka*- and *Suśrutasaṃhitā* with their commentaries, the works of Vāgbhaṭa, the *Śārngadharasaṃhitā*, the *Bhāvaprakāśa*, etc.; it is accompanied by a Hindī commentary. The same author wrote an *Abhinavaśarīrakriyāvijñāna*,⁵³ *Āyurvedīyapadārthavijñāna*,⁵⁴ and *Nidānacikitsāśāstāmālaka*.⁵⁵

ĀYURVEDĪYA OṢADHINIGHAṆṬU by Tayyil Kumāran Kṛṣṇan,⁵⁶ a dictionary containing about 25,000 Sanskrit names of drugs.

ĀYURVEDĪYAPADĀRTHAVIJÑĀNA by Raṇajitrāya Desāī.⁵⁷

ĀYURVEDĪYA-PADĀRTHAVIJÑĀNA by Cintāmaṇi Gaṇeśa Kāśīkar.⁵⁸

This work deals with philosophical concepts and their use in āyurveda. It is divided into four chapters: (1) pramāṇavicāra (1–59), (2) kāryakāraṇabhāvaavicāra (60–74), (3) prameyavicāra (75–122), and (4) puruṣavicāra (123–134), followed by a pariśiṣṭa on the tantrayuktis (135–155), and one on weights, measures, units of time, etc. (156–169).

Apart from several medical works, numerous philosophical treatises are quoted.

ĀYURVEDĪYA PAÑCAKARMACIKITSĀ, compiled by Mukundīlāl Dvivedī, Tārācand Śarmā, and Bhairava Miśra,⁵⁹ is an extensive compilation of verses and prose passages on pañcakarman from the following sources: *Aṣṭāṅgaḥṛdayasaṃhitā* with the commentaries of Aruṇadatta, Candranandana, Hemādri and Parameśvara, *Aṣṭāṅgasamgraha* with Indu's commentary, *Bhāvaprakāśa*, *Bhelasamhitā*, Cakrapāṇidatta's *Cikitsāsāṃgraha* with the commentary of Śivadāsasena, *Carakasamhitā* with the commentaries of Cakrapāṇidatta, Jejjaṭa and Yogīndranāthasena, *Hārītasamhitā*, *Kāśyapasaṃhitā*, *Śārṅgadharasaṃhitā* with the commentaries of Āḍhamalla and Kāśīrāma, *Suśrutasaṃhitā* with the commentaries of Ḍalhaṇa and Hārāṇacandra, and Vaṅgasena's *Cikitsāsārasaṃgraha*.

ĀYURVEDĪYAPATHYĀPATHYAVIMARŚA, written by Paramānanda,⁶⁰ is a treatise on dietetics.

ĀYURVEDĪYASĀRĪRA by Gaṇeśaśarman.⁶¹

ĀYURVIJÑĀNARATNĀKARA by Yogendranātha.⁶² This treatise, partly in prose, partly in verse, is divided into four sections (khaṇḍa). The first and longest one, in seven chapters, is concerned with vāyu; the second, in two chapters, with pitta, and the third, in three chapters, with kapha. Chapter one of section four is about combinations of the doṣas, while its second chapter contains a summary of the contents of the book.

The opening chapter gives definitions of āyus, vyādhi, etc. The remaining part of section one is devoted to vāyu and its qualities (chapter two), the types of vāyu, their seats, actions, etc., and the nāḍīs (chapter three), the excitement of vāyu (chapter four), diseases caused by vāyu (chapter five), the general treatment of these diseases (chapter six), and specific remedies against these diseases (chapter seven). The arrangement of sections two and three is analogous to that of section one.

A special feature of the *Āyurvijñānaratnākara* is that it draws its material from a wide range of sources. It quotes not only from the *Atharvaveda*, various Upaniṣads, Tantras, and āyurvedic treatises, but has also been influenced by western medicine. Borrowed from western medical science is, for example, the description of ṣoṇitocchvāsa (hypertension; I.3.20) and its treatment (I.7, pages 271–272). Other noteworthy features are the attention paid to the system of nāḍīs (I.3), a rather long passage devoted to vāyupari vartana (change of climate; I.3.22), the employment of the term upadaṃśa as an equivalent of syphilis (I.7, page 254) and of aupasargikameha as the equivalent of gonorrhoea (I.7, page 254), the description of a plant, called

svalpacandramūla, as a remedy against insanity (I.7),⁶³ and the use of vernacular terms (I.7, page 273).

Authorities and works quoted are: *Atharvaveda* (I.3.41 and 50), *Bhagavadgītā* (II.1.2; III.1.26), *Bhāvamīśra* (I.2.12 and 27; I.3.20), *Bhāvaprakāśa* (I.3.33), *Bhela* (II.1.17), *Brahmayāmala*⁶⁴ (I.3.78), *Caraka* (passim), *Chāndogyopaniṣad* (I.3.40, 56, 64, 124), *Ḍalhaṇa* (III.1.18 and 28), *Jatukarṇa* (I.4.19), *Mahābhārata* (I.3.38, 39, 55, 67, 92), *Mūlabhārata* (I.3.31), *Nāḍivijñāna* (I.3.74), *Narapatijayacaryā Svarodaya*⁶⁵ (I.3.78), *Pātañjaladarśana* (I.3.116), *Prāṇatoṣaṇitantra* (I.3.48),⁶⁶ *Praśnopaniṣad* (I.3.73, 113, 121), *Rāghavabhaṭṭa* (I.3.130),⁶⁷ *Rāyamukuta* (I.3.34, 45, 83, 96, 108),⁶⁸ *Rudrayāmala* (I.3.76), *Śāṃkarabhāṣya* (I.3.63),⁶⁹ *Śāṃkhyakārikā* (III.1.1), *Śārngadhara* (I.2.17; 3.31) and its *Gūḍhārthāḍīpikā* commentary (by Kāśīrāma; I.3.31), *Śrīmadbhāgavata* (I.3.39), *Suśruta* (passim), *Tantraśāstra* (I.3.31), *Tattvacintāmaṇi* (I.3.81),⁷⁰ *Triśāṭcārya* (i.e., *Tisāṭa*; I.4.26), *Vāgbhaṭa* (passim), *Vidvanmanorañjanī*⁷¹ (I.3.122), *Viśvasāratāntra* (I.3.47, 84, 95, 106),⁷² *Yogārṇava* (I.3.46, 66, 68, 85, 91, 98, 103, 107, 115, 120, 125),⁷³ and *Yogiyājñavalkya*⁷⁴ (I.3.37, 49, 69, 86, 99, 109, 131).⁷⁵

BĀLACIKITSĀTANTRA, compiled by Gaurīśaṃkara Śarman.⁷⁶

BHAIŚAJYAMAṆIMĀLIKĀ, compiled by Satyācaraṇa Sena Gupta.⁷⁷

BHĀRATABHAIŚAJYARATNĀKARA, compiled by Rasavaidya Nagīnadāsa Chaganalāla Śāha,⁷⁸ consists of a huge and very useful collection of about 10,000 formulae drawn from numerous sources.⁷⁹ A short chapter at the beginning contains definitions of the five types of kaṣāya and rules for the prakṣepa to be added. The formulae are arranged alphabetically, according to the first akṣara of their name. Those beginning with the same akṣara are listed in a fixed order: kvātha, cūrṇa, guṭikā, guggulu, pāka, avaleha, ghr̥ta, taila, āsavāriṣṭa, lepa, dhūmra, añjana, nasya, rasa, kalpa, and miśra.

The *Bhāratabhaiśajyaratnākara* is one of the sources of the *Bheṣajasamhitā* and the *Rasadhātuprakāśa*.

BHEŚAJASAMHITĀ by Caraṇatīrtha Mahārāja (i.e., Jīvrām Kālidās).⁸⁰ This work consists of a collection of formulae, compiled from a large number of sources, accompanied by explanations in Hindi. The explanations are about the way of preparing the compound drugs, their bhāvanā, dosage, anupāna, and indications.

The treatise is divided into sixteen sections (prakaraṇa) and a pariśiṣṭa. Each section deals with a particular group of pharmaceutical preparations: (1) rasa, rasāyanakalpa (318 formulae); (2) kūpipakvarasa (25 formulae); (3) parpatī, poṭṭalī (33 formulae); (4) lauha, maṇḍūra (57 formulae); (5) bhasman, piṣṭi (77 formulae); (6) guṭikā, guggulukalpa (129 formulae); (7) cūrṇakalpa (100 formulae); (8) añjana, netrayoga (27 formulae); (9) nasya, dhūmayoga, dhūpa (17 formulae); (10) kṣāra, lavaṇa, drāva (7 formulae); (11) ghr̥ta (55 formulae); (12) taila (80 formulae); (13) lepa, malama (53 formulae); (14) kvātha, kṣīrayoga (136 formulae); (15) avaleha, pāka (48 formulae); (16) āsava, ariṣṭa, arka (40 formulae); the pariśiṣṭa section is concerned with the purification of a number of substances (dravyaśodhana), and with weights and measures

(mānaparibhāṣā).

By far the larger part of the formulae are quoted from Sanskrit texts; those borrowed from treatises in Hindī are not reproduced, but summarized.

The sources of the *Bheṣajasaṃhitā* are: *Aṣṭāṅgahṛdayasaṃhitā*, *Āyurvedavijñāna* (by Vinodālāla Sena), *Basavarājīya*, *Bhaiṣajyaratnāvalī* (by Govindadāsa), *Bhāratabhāṣajyaratnākara*, *Bhāvaprakāśa*, *Brhadyogatarāṅgiṇī*, *Brhannighaṇṭuratanākara*, *Cakradatta*, *Carakasaṃhitā*, *Cikitsāpradīpa*,⁸¹ *Dravyaguṇavijñāna*,⁸² *Rasacaṇḍāṃśu*, *Rasakāmadhenu*, *Rasāmṛta*, *Rasaprakāśasudhākara*, *Rasarājāsundara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasasaṃketakalikā*, *Rasatantrasāra* or *Siddhaprayogasamgraha*,⁸³ *Rasatarāṅgiṇī*, *Rasāyanasāra*,⁸⁴ *Rasayogasāgara*, *Rasendracintāmaṇi*, *Rasendrasārasamgraha*, *Rasoddhāratāntra*,⁸⁵ *Sahasrayoga*, *Sārṅgadharaśaṃhitā*, *Siddhabhaiṣajyamaṇimālā* (by Kṛṣṇarāma), *Siddhayogasamgraha*,⁸⁶ *Vaidyajiṇana*, *Vaidyayogaratnāvalī*,⁸⁷ *Yogacintāmaṇi*, *Yogaratnākara*, *Yogaśataka* (by Vopadeva),⁸⁸ and *Yogatarāṅgiṇī*.

Jivṛām Kālidās⁸⁹ was born from brāhmaṇa parents in a village called Mevāsā, near Jāmnagar, in 1882/83. After the death of his parents, when he was eight years old, he went to live with a paternal uncle in Goṇḍal, where he studied Sanskrit with Kevalrām Līlādharaṇī Śāstrī. He moved to Gīrnār in 1903/04 and studied Sanskrit, āyurveda and mantraśāstra with Acyutānand Brahmācārī, with whom he wandered in the Himālayas. After having lived for some time in Bombay, he started a practice in Goṇḍal, where he founded the Rāsāśālā Auśadhāśrama in 1909/10. The Mahārāja of Goṇḍal, Bhagavatsīṃhajī Bahādūr, appointed him royal physician in 1915/16. Later in life, he became a saṃnyāsīn and changed his name into Caraṇatīrthaṇī Mahārāj.⁹⁰

Jivṛām Kālidās not only wrote the *Bheṣajasaṃhitā* and *Rasoddhāratāntra*, but also edited a number of Sanskrit medical texts (*Prasāstaauśadhasamgraha*, *Rasaprakāśasudhākara*, *Vādi-* and *Ṛddhikhaṇḍa* of the *Rasaratnākara*, *Vyādhinigraha*, *Yogatarāṅgiṇī*).

BHĪṢAGBHŪṢAṆA, compiled by Pārthasārathi Kṛṣṇamācārya.⁹¹

BHĪṢAKSARVASVA, composed by Aghoranāthasāstrin,⁹² who also wrote an auto-commentary on his work.

The first part of the *Bhīṣaksarvasva* consists of 440 verses, arranged in four chapters (adhyāya). The treatise is characterized by a mixture of traditional āyurvedic and western medical concepts.

Chapter one (upakramaṇīya) deals with some definitions (jīvita, dhātu, śarīra), the three guṇas and the three doṣas, types of country (deśa), divisions of time, astrology connected with medicine, the seven dhātus, the six tastes, the three doṣas again, and, finally, increase and decrease of the doṣas, dhātus and impurities (mala). Chapter two (śarīravijñānīya) is about anatomy, chapter three (sātmyarakṣaṇīya) on behavioural rules during the day and the night and during the seasons, and chapter four (janapadoddharaṇīya) on the construction of a house, garden, etc., where one can live healthily. Sources are not referred to.⁹³

The three doṣas and the three guṇas are interconnected: vāta and pitta are composed of sattva and rajas, kapha consists of tamas (1.7–15). The three types of country correspond to the three doṣas: vāta predominates in the pārvatya,⁹⁴ pitta in the jāṅgala, and kapha in the ānūpa type (1.18–19).⁹⁵ The first five days of a lunar fortnight, called karṣaṇī, are characterized by an increase of vāta and are suitable for śamanī therapeutic measures; the second five, called śoṣaṇī, characterized by an increase of pitta, are suitable for rasāyana procedures; the third five, called poṣaṇī, characterized by an increase of kapha, are suitable for haraṇī purposes (1.29–33).⁹⁶ Relationships are described between the seven grahas on the one hand, and the three guṇas, the three doṣas, the seasons, and various parts of the human body on the other (1.34–42). Eight chief parts of the body are distinguished: the head, the neck, the two arms, the chest, the belly, the two lateral parts of the chest (pārśva), the back, and the two legs (2.6–23).⁹⁷ The thymus is known to the author.⁹⁸ Voluntary (kāmaṇḍita) and involuntary (svavṛttaka) muscles are distinguished (2.64–68). The kaṇḍarās are described as tendons in the sense of western anatomy (2.80–81). The term dhamanī is used for an artery, śīrā for a vein (e.g., 2.107), srotas for a lymph vessel (2.107–110), snāyu for a nerve (2.111–114). After dealing with anatomy along the lines of the *Suśrutasaṃhitā*, mixed with some modern concepts, Aghoranātha describes the organ systems and their physiology in agreement with western medicine. He explains, for example, the circulation of the blood (rakta-parikrama) and the functions of heart and lungs (2.147–161), mentions the three small cartilaginous bones of the middle ear (2.131–134), the olfactory nerve (2.135–137), the ovaries (dimbakoṣa: 2.219), the Fallopian tubes (karṣikā: 2.219), etc.

Sources quoted in Aghoranātha's auto-commentary are: *Ānandalaharī* (3.21),⁹⁹ *Ātreya* (2.191–192), *Bhānumatī* (3.7), *Bhāvaprakāśa* (often), *Carakasamhitā* (often), *Gāruḍa* (4.4 and 10–11), *Garuḍapurāṇa* (4.16), Hemacandra (2.212), Jayadatta (2.137–143), *Jyotiṣasaṃhitā* (1.37–38), Mādhavakara (1.104), *Nāḍīprakāśa* (2.85), *Nāḍīvijñāna* (2.94–96), Nandana (1.26 and 27),¹⁰⁰ *Rājasamgraha* (3.7),¹⁰¹ *Rogaviniścaya* (1.85 and 104), *Śārṅgadharasaṃhitā* (2.162–163), *Suśrutasaṃhitā* (often), *Vāgbhaṭa* (2.162–163), *vaidyakaśiddhavaṇa* (2.202), and *Viśva* (2.210).

The author was born in Koṇanagara, on the banks of the Ganges. He was a son of Gopālacandra and a pupil of Harinātha.¹⁰²

Aghoranātha completed his *Bhīṣaksarvasva* in 1906/07.¹⁰³

BRHACCHĀRĪRA¹⁰⁴ by Vaidya Ratnam P.S. Vāriyar.¹⁰⁵ Part II is a treatise on osteology in verse and prose, consisting of ten chapters (adhyāya): (1) prsthavaṇṣavivaraṇa (the vertebral column), (2) śiraḥkapālāvivarāṇa (the flat bones of the cranium), (3) itarakarotyasthivivarāṇa¹⁰⁶ (other bones of the skull, such as the sphenoid: sphīnakāsthī, ethmoid: sīvakāsthī, etc.), (4) mukhamāṇḍalāsthivivarāṇa (the bones of face and oral cavity), (5) samastāśiraḥkaṇkālīvivaraṇa (a survey of the structures of the head), (6) urosthīpārśukāvivarāṇa (the bones of the thorax), (7) aṇṣacakraṇavivarāṇa (the bones of the shoulder girdle), (8) uttaraśākhāsthivivarāṇa (the bones of the arms), (9) kaṭīcakraṇavivarāṇa (the bones of the pelvic region), (10) adhaśśākhāsthivivarāṇa (the bones of the legs).

BRHADĀSAVĀRIṢṬASAMGRAHA by Kavirāj Devasiṃha Viṭṭhal¹⁰⁷ is a collection of 170, alphabetically arranged recipes of āsavaś and aṛiṣṭaś.

Sources mentioned are: *Aṣṭāṅgaḥṛdayasaṃhitā*, *Aṣṭāṅgasamgraha*, *Āyurvedasaṃgraha*, *Āyurvedasopāna*,¹⁰⁸ *Bhaiṣajyaratnāvalī*, *Bhāratabhaiṣajyaratnākara*, *Bhāva-prakāśa*, *Cakradatta*, *Carakasamhitā*, *Gadanigraha*, *Rasakāmadhenu*, *Śārṅgadharma*, *Siddhabhaiṣajyamānīmālā*, *Vaidyakaśikṣā*,¹⁰⁹ *Vaṅgesena*, *Vīrasimhāvaloka*, *Vṇḍamādhava*, *Yogacintāmaṇi*, *Yogarātnākara*, and *Yogatarāṅgiṇī*.

CIKITSĀNUŚĀSANA by Gaṇapatiśāstrin.¹¹⁰

CIKITSĀPRABANDHASAMUCCAYA by Rāmacandra Śarman.¹¹¹

CIKITSĀSAMGRAHA by Lakṣmīdhara Śarmā.¹¹² This work, written partly in Sanskrit, partly in Hindī, consists of the following chapters: netraparīkṣā, yantracikitsā, mantracikitsā, anupānavyavasthā, tailādhyāya, mūtraparīkṣā, sujākacikitsā, nighaṇṭu, strīrogādhikāra, vājīkaraṇādhikāra, vīryastambhādhikāra, rasāyanādhikāra, dravyādi-vyavasthā, śaḍrasavyavasthā, dravyaguṇavyavasthā, dravyavīryavyavasthā, dravya-prabhāvyavasthā, dravyavipākavyavasthā, aśvacikitsā, and virecana.

Sources referred to are: Caraka (93; 139), Lolimbarāja (43), Suśruta (149; 172), and Vāgbhaṭa (137; 140; 143; 144; 161; 165; 171).

The *Cikitsāsamgraha* was completed in 1902.¹¹³

Lakṣmīdhara Śarmā was born in Karhal (Maiṃnapurī district) in 1857. He became a well-known medical practitioner in Maiṃnapurī, where he founded the Caturvedī Auśadhālaya. He died in 1907. Apart from the *Cikitsāsamgraha*, he wrote the *Ārogya-tāpaddhati* (published in 1901) and *Āhārasaṃhāra* (published in 1982).¹¹⁴

CIKITSĀTARANGINĪ, compiled by Dayānidhi Miśra.¹¹⁵

CIKITSĀTATTVA PRADĪPA by B.V. Gokhale.¹¹⁶

CŪRṆACIKITSĀDARPAṆA, compiled by Gaṇapatiśāstrin.¹¹⁷

DEHATATTVA, compiled by Vipinavihārīn Gupta.¹¹⁸

DOṢAKĀRAṆATVAMĪMĀMISĀ by Priyavrat Śarmā.¹¹⁹ This small work, in prose, interspersed with quotations, is concerned with the doṣaś and their role in the aetiology of diseases. It is divided into two parts, written in Sanskrit and Hindī respectively.

The Sanskrit part deals with the following subjects: kāraṇatvaṃ, kāryakāraṇabhāvaḥ, kāryasyotpādavināśau, vikāraḥ, doṣavaśiṣamyaṃ kāraṇaṃ kāryaṃ vā, doṣāṇaṃ kāraṇatvaṃ, siddhāntaḥ.

The subjects of the Hindī part, corresponding to but not completely identical with that composed in Sanskrit, are: (1): kāraṇatva kā sāmānya vivecan: paribhāṣā, prakār, kāryakāraṇabhāva, kārya kī utpatti aur vināś, svabhāvoparamavād; (2): doṣoṃ kā kāraṇatva: vikār kā svarūp, doṣavaśiṣamya kāraṇaṃ yā kārya, vikār kī utpatti, Vāpyacandra kā mat, Vijayarakṣit kā uttarapakṣa, arvācīn ācāryoṃ kā mat, siddhānt.

Sources quoted are: *Aṣṭāṅgaḥṛdayasaṃhitā*, Cakrapāṇidatta's commentary on the *Carakasamhitā*, *Carakasamhitā*, Dhruvādhikāśāstrin's ṭippaṇī on the *Vaiśeṣikasūtra*,¹²⁰ Gaṇanāthasena's *Siddhāntanidāna*, Gaṅgādhara's *Jalpakaḥpataṛu* on the *Carakasam-*

hitā, Gītā, Kārikāvalī,¹²¹ *Mayūkha*,¹²² *Muktāvalī*,¹²³ *Nyāyabodhinī*,¹²⁴ *Nyāyasūtra*, *Pratibimbaṭikā*,¹²⁵ on the *Tarkasaṃgraha*, Śaṃkaramiśra's *Vaiśeṣikasūtropaskāra*,¹²⁶ *Sāṃkhyakārikā*, *Suśrutasaṃhitā*, *Tarkasaṃgraha*,¹²⁷ Uddyotakara's *Nyāyavārttika*,¹²⁸ Vācaspati-miśra's *Nyāyavārttikatātparyāṭikā*,¹²⁹ and *Sāṃkhyatatvakaumudī*, *Vaiśeṣika-sūtra*, Vāpyacandra, and Vijayarākṣita's part of the *Madhukośa*.

DRAVYAGUṆASŪTRA by Priyavrat Śarmā¹³⁰ is a short work in sūtra style on the principles of Indian pharmacology.

Chapter one (padārthaprakaraṇa; 7 sūtras): the subject of the work; the scope of the term guṇa; āyurveda was divided into eight branches by the ancient sages, but is now regarded as consisting of sixteen branches: maulikasiddhānta (basic concepts), śārīra (anatomy and physiology), dravyaguṇa (pharmacology), bheṣajakalpanā (the preparation of medicines), rasaśāstra (iatrochemistry), nidāna (pathology and diagnostics), kāyacikitsā (internal medicine), svasthavṛtta (maintenance of health), mānasaroga (psychiatry), rasāyana (measures conducive to longevity), vājīkaraṇa (aphrodisiacs), agadatantra (toxicology), śalya (surgery), śālākya (the treatment of diseases of the supraclavicular region), kaumārābhṛta (paediatrics), and prasūtitantra (obstetrics and gynaecology); dravyaguṇa is the foremost among these branches; dravyaguṇa is divided into nāmarūpajñāna (pharmacognosy), guṇajñāna (knowledge concerning the properties of medicinal substances), karmaññāna (knowledge concerning their actions), prayogajñāna (knowledge concerning their applications), yogajñāna (knowledge concerning compound formulae), and kalpajñāna (knowledge concerning the preparation and dosages of kvāthas, etc., medicated ghees and oils, etc.); the seven basic concepts of dravyaguṇa: dravya, guṇa, rasa, vipāka, vīrya, prabhāva, and karman.

Chapter two (dravyaprakaraṇa; 10 sūtras): dravya, the substratum of guṇa and karman, is the samavāyikāraṇa; dravya is divided into āhāra (articles of food) and auṣadha (drugs); its sources are of an inorganic (bhauma), animal (jāṅgama) or vegetable (audbhida) nature; vegetable substances are derived from trees (vṛkṣa), creepers and climbers (latā), shrubs (gulma), and herbs (kṣupa); dravyas are śamana (pacifying), kopana (causing excitement of the doṣas) or svasthahita (maintaining a healthy condition); groups (gaṇa) of drugs are those called jīvanīya, etc., vidārigandhādi, etc.; all the dravyas are composed of the five mahābhūtas; each and every dravya may be used as a drug; dravyas are the causes of stability, increase and decrease of the (constituents of the) body; dravya is predominant because it constitutes the substratum of guṇa, etc.

Chapter three (guṇaprakaraṇa; 10 sūtras): guṇa inheres in dravya and is an asamavāyikāraṇa; the guṇas are forty-one in number and are classified as kāyika (somatic), sāttvika (psychic), bhautika (physical) and yaugika (applicable in medicine); the somatic guṇas are arranged in ten pairs of opposites: guru and laghu, manda and tīkṣṇa, śīta and uṣṇa, snigdha and rūkṣa, ślakṣṇa and khara, sāndra and drava, mṛdu and kāṭhina, sthira and sara, sthūla and sūkṣma, picchila and viśada; they may also be classified according to the predominating mahābhūta: guru, manda, kāṭhina, sthira, sāndra and sthūla are pāṛthiva; snigdha, drava, śīta, mṛdu, sara and picchila are āpya; uṣṇa and tīkṣṇa are āgneya; rūkṣa, khara and viśada are vāyavya; laghu, sūkṣma and

ślakṣṇa are nābhāsa in nature; the six psychic guṇas are: icchā, dveṣa, sukha, duḥkha, prayatna and buddhi; the physical guṇas are: śabda, sparśa, rūpa, rasa and gandha; the ten yaugika guṇas are: paratva, aparatva, yukti, saṃkhyā, saṃyoga, vibhāga, prthaktva, parimāṇa, saṃskāra, and abhyāsa; incompatibility may arise from the combination (saṃyoga) of dravyas; saṃyoga, vibhāga, saṃskāra and yukti influence the action of dravyas and determine their strength or weakness; guṇa is important due to its attractive character (ākarṣakatva), resembling that of a rope.

Chapter four (rasaprakaraṇa; 14 sūtras): rasa (taste) is the object of the gustatory sense and has dravya as its substratum; rasa is perceived due to its contact (nipāta) with the sense organ of gustation; the tastes are six in number: madhura, amla, lavaṇa, kaṭu, tikta and kaṣāya; madhura is pāṛthiva and āpya in nature, amla is pāṛthiva and āgneya, lavaṇa is āpya and āgneya, kaṭu is āgneya and vāyavya, tikta is vāyavya and ākāśīya, kaṣāya is pāṛthiva and vāyavya; madhura counteracts vāta and pitta, but increases kapha; amla and lavaṇa increase kapha and pitta, but counteract vāta; kaṭu increases vāta and pitta, but counteracts kapha; tikta and kaṣāya counteract kapha and pitta, but increase vāta; many more actions are attributed to the tastes; madhura, kaṣāya and lavaṇa are guru to a decreasing degree; tikta, kaṭu and amla are decreasingly laghu in the mentioned order; madhura, amla and lavaṇa are in a similar way snigdha; kaṣāya, kaṭu and tikta are rūkṣa, madhura, kaṣāya and tikta are śīta, lavaṇa, amla and kaṭu are uṣṇa in a similar way; lavaṇa, amla and madhura are usually employed to counteract vāta, tikta, madhura and kaṣāya to counteract pitta, kaṭu, tikta and kaṣāya to counteract kapha; anurasa is an unmanifest rasa; rasa is important due to its prominence in practice and because it indicates the nature of a dravya.

Chapter five (vipākaprakaraṇa; 5 sūtras): vipāka is a transformation (pariṇati) of dravya, occurring at the completion of digestion (pākaṇiṣṭhā); it is of three types according to taste and its effect on the doṣas: madhura, amla and kaṭu; it is of two types according to the guṇas: guru and laghu; madhuravipāka increases kapha, amlavipāka pitta, and kaṭuvipāka vāta; other effects should be noticed too; guruvipāka is bṛṃhāṇa, laghuvipāka is laṅghana; vipāka is important because the good or bad effects of a dravya depend on it.

Chapter six (vīryaprabhāvaprakaraṇa; 9 sūtras): vīrya is śakti, the means of action of a dravya; in practice (vyavahāra), it consists of the active constituents of a substance (kārmukadravyāvayava) in the form of the essence of the mahābhūta(s) present in excess; in pharmaceutical processing, the vīrya is transferred (saṃkrānti) to the medium; vīrya is of six types: guru, laghu, śīta, uṣṇa, snigdha, and rūkṣa, which lead to increase or decrease of the doṣas, and are the basis of the six types of therapeutic procedure;¹³¹ vīrya has the character of guṇa, is manifested by its karman, and has dravya as its substratum; prabhāva is a specific power (śakti); vīrya and prabhāva may be determined from the entry (of a substance) into the body onwards until the end of its stay there; vīrya is important because it is instrumental in the action (of a substance); prabhāva is important due to its specificity and its strength.

Chapter seven (karmaprakaraṇa; 3 sūtras): karman is the cause of saṃyoga and vibhāga, is characterized by activity, and has dravya as its substratum; adhikaraṇa is the site of action; karman is important as the object pursued by physicians.

Chapter eight (auśadhaprakaraṇa; 51 sūtras): auśadha is called thus because it possesses oṣa, which is the same as vīrya; an auśadha should possess rasa, etc., and be suitable (to the particular occasion on which it is used); it should be examined by means of pratyakṣa and anumāna in terms of prakṛti, deśa and kāla; the dosage depends on the disease, the drug itself and the strength of the patient; pharmaceutical preparations are svarasa, kvātha, etc.; the main actions of many single drugs are described (8.6–50); an ideal drug is that one which does not lead to complications.

Chapter nine (samāhāraprakaraṇa; 5 sūtras): sāmānya is the same as tulyārthatva and is the cause of increase, while viśeṣa has an opposite meaning and is the cause of decrease; in general, vipāka overcomes rasa, vīrya overcomes vipāka, prabhāva overcomes vīrya; the more potent property overcomes the less potent one; rasa, etc., exhibit their proper action; a wholesome substance increases the life span, an unwholesome substance reduces it.

Authorities and works quoted or referred to in the auto-commentary are: Agniveśa (2.5), Amara (2.3 and 4; 8.1), *Amarakośa* (3.7), *Aṣṭāṅganighaṇṭu* (8.42), Bhāvamiśra (2.7; 8.6, 11, 31, 37), *Bhāvaprakāśa* (8.9), Cakrapāṇi(datta) (2.2, 5, 6; 3.7; 4.4; 5.1; 6.4; 7.1; 8.3), Cakrapāṇi(datta)'s *Āyurvedadīpikā* (1.2; 4.13; 8.1), Caraka (passim), *Dalhaṇa* (2.4; 6.4; 8.31), *Dhanvantarinighaṇṭu* (8.3), the author's *Dravyaguṇavijñāna* (1.1; 4.12), Hemādri (3.3), Hemādri's *Āyurvedarasāyana* (6.4), *Madanavinoda* (8.6 and 9), Narahari's *Rājanighaṇṭu* (1.3), Naraharipaṇḍita (2.4), Narasiṃha's commentary on the *Rasavaiśeṣikasūtra* (3.1; 4.1; 6.5), *Nyāya* (1.7), the author's *Priyanighaṇṭu* (8.13 and 23), *rasaśāstra* (2.3), *Rasavaiśeṣika(sūtra)* (1.7; 2.1; 3.1; 4.4; 8.3), *Sāṃkhyā* (2.7), *Sāṃkhyakārikā* (3.5), Śivadāsa (5.1; 6.2), Śivadāsa's commentary on Cakrapāṇi's *Dravyaguṇa* (1.1), the author's *Ṣoḍaśāṅgahṛdaya* (1.3; 8.3 and 41), Śrībhagavant (3.10), Suśruta (passim), Tīsaṭa (8.48 and 49), Vāgbhaṭa (1.4; 2.5 and 6; 3.3; 4.3; 4.13; 5.1; 6.6; 8.9, 15, 37, 42, 46), *Vaiśeṣika* (1.7; 7.1; 9.1), Vijayarakṣita (8.10), Vopadeva's *Siddhamantraprakāśa* (6.1), *Vṛddhavāgbhaṭa* (6.4 and 6; 8.3 and 10), and Yāska's *Nirukta* (2.4).

DRAVYAGUṆAVIJÑĀNA¹³² by Yādavaśaman,¹³³ a work in three volumes. Volume I, partly in Sanskrit, partly in Hindī, deals with the basic concepts of pharmacology and explains a large number of technical terms; the Sanskrit passages consist of quotations and comments by the author. Volume II, in Sanskrit and Hindī, is devoted to rules pertaining to the preparation of drugs (paribhāṣā); the Sanskrit passages consist partly of quotations, partly of verses and comments by the author. Volume III, in Hindī, describes the names, properties and actions of numerous medicinal substances.

GADAVINISĀYA or *Roga jñānakrama* by B.L.S. Silva.¹³⁴

INDIAN MEDICINAL PLANTS: A COMPENDIUM OF 500 SPECIES, edited by P.K. Warrier, V.P.K. Nambiar and C. Ramankutty.¹³⁵ The five volumes of this work contain, apart from quotations from numerous nighaṇṭus, also many Sanskrit verses describing medicinal plants employed in Kerala which are absent from other treatises.¹³⁶ These stanzas were probably composed by S. Raghunatha Iyer, on whose research the com-

pendium is based.

Examples of these plants are: anyāmrāgandhā,¹³⁷ aśvakatrī,¹³⁸ auddālaka (also called śvānamāra),¹³⁹ bhūlavāṅga,¹⁴⁰ cāmpeya,¹⁴¹ caturāṅgī (also called vanacchedī),¹⁴² chattrī (also called kukkurajihvā),¹⁴³ chāyāparpatikā,¹⁴⁴ dārukanda (also called kalpakanda),¹⁴⁵ dhanavallī,¹⁴⁶ garalaphalā (also called kākamārī),¹⁴⁷ giriśālmalikā,¹⁴⁸ gostanī (also called vanya-jātī),¹⁴⁹ hemamālātī (also called caturdhārālatā),¹⁵⁰ kaṁsamāra,¹⁵¹ kāñcana,¹⁵² kṛṣṇāmlīkā (also called golikā),¹⁵³ latākṣīrī,¹⁵⁴ nikuñjikā,¹⁵⁵ nīlavallī (also called vallīśākhoṭa),¹⁵⁶ nityakalyāṇī,¹⁵⁷ pratānikā,¹⁵⁸ pūlikā (also called kṛṣṇakāmbhojī),¹⁵⁹ śathāmbaṣṭhī,¹⁶⁰ sphotyābhujaiṅga,¹⁶¹ śvetanirviṣā,¹⁶² tāmraka,¹⁶³ tripuṭa,¹⁶⁴ viṣaghñī (also called anādanā),¹⁶⁵ vitāna,¹⁶⁶ and yūthikāparṇī.¹⁶⁷

JVARATIMIRANĀŚAKA by Rāmprasād Kyākhūb Caube.¹⁶⁸ This work is a short treatise on fevers and their treatment, in Sanskrit verse and Hindī prose.

Chapter one (13 verses) is of an introductory nature; chapter two (7 verses) discusses fever in general; chapter three (63 verses) deals with the general treatment of fevers; chapter four (156 verses) is about the types of fever and their treatment; chapter five (45 verses) contains a number of prescriptions (rasas, pākas, etc.).

Sources are not mentioned.

The Hindī parts are strongly influenced by Yūnānī and western medicine. On some occasions, Kyākhūb, who calls himself a hakīm, gives answers to questions put by Gaurīśāṅkar Caube.¹⁶⁹

KĀYACIKITSĀ, compiled by Satyācaraṇa Sena Kavirañjana.¹⁷⁰

LAKṢMĪMODATARĀṅGIṆĪ by Gaṇeśadatta Śāstrin¹⁷¹ is a work of about 800 verses, arranged in four chapters (taraṅga).

Chapter one gives a detailed genealogy of the author; it also tells about his studies and the composition of his book, completed in 1930. Chapter two is concerned with the rules for a healthy life (svasthavṛtta), chapter three with the regimen to be observed during the various seasons (ṛtucaryā). Chapter four, the longest one, divided into thirty-four adhikāras, deals with the treatment of diseases and consists mainly of recipes. A shorter version of the author's genealogy closes the work. The order of the diseases agrees with that of the *Mādhavanidāna*. The sources of some formulae are given in footnotes.¹⁷²

The *Lakṣmīmodatarāṅgiṇī* mentions a large number of drugs that are rare or unknown in earlier works. Unusual names of medicinal substances are employed. Borrowings from Islamic and western medicine are also met with. Examples are:¹⁷³ abhala (94),¹⁷⁴ anisuka (65),¹⁷⁵ dārusitā (25; note = dālacinī), iśāvagola (21),¹⁷⁶ jarāvinda (89),¹⁷⁷ jūphā (53),¹⁷⁸ kāhū (50),¹⁷⁹ kākodara (33; note = ahiphena), kālasorakṣāra (45), kāsinī (25),¹⁸⁰ kavāvakhannā (52),¹⁸¹ khatamī (52),¹⁸² koṣaphala (92; note = kavāvacinī), kusā (49; note = gojihvā), madaṅgi (30; note = mastagī), naraśathī (72),¹⁸³ niṣphena (33; note = ahiphena), pāṣāṅkola (104), pharaphendu (21; note = gavākṣī), picchāphala (52), poḍina (71),¹⁸⁴ puṣpakanda (31; note = gulakanda), revantakāṣṭha (88),¹⁸⁵ sanāmikā (88; note = sanāya),¹⁸⁶ saṅgayasava

(67),¹⁸⁷ śrīkrṣṇabīja (81),¹⁸⁸ ustakhaddūsa (25),¹⁸⁹ and yākūtaka (67).¹⁹⁰

MĀDHAVANIDĀNAPARIŚIṢṬA by Brahmasaṃkara Śāstrī.¹⁹¹

MĀDHAVANIDĀNAPARIŚIṢṬA by Dīnanātha Śarmasāstrin, an appendix to the *Mādhavanidāna*,¹⁹² describing, in Sanskrit, a long series of diseases only found, for the largest part, in more recent āyurvedic literature: mantharakajvara (enteric or typhoid fever), granthikajvara (bubonic plague), vātaślaishmikaajvara (influenza), sandhikajvara (rheumatic fever), śvasanakaajvara (pneumonia), ākṣepakajvara (cerebrospinal fever), daṇḍakajvara (dengue), karṇamūlikajvara (mumps), mālṭājvara (Malta fever), kālajvara (kala azar), aupasargikavisūcikā, urastoya (pleurisy), phupphusāvaraṇapradāha (dry pleurisy), smaromnāda, bhramonmāda, mahāgada, vṛkkaroga, agnyāśayaroga, tāntavikaroga, cullikāgranthiroga (diseases of the thyroid), klaibya, śukradoṣa, śukrameha, ojomaha, somaroga, mūtrātisāra, vandhyāroga, jarāroga, upāntraśoṭha (appendicitis), hṛdyantraroga,¹⁹³ pāradaroga, āgantukapakṣāghāta, śaiśavasamnyāsa, yoṣāpasamāra, upadaṃśa, sahaḥopadaṃśa, bhr̥ṣoṣṇavāta (gonorrhoea), aṃśughāta (sunstroke), and śītalā.

MAHĀYOGĀNANDĀMṚTAKALPAVALLĪ by Venkaṭasimhādri Jagapati Rāju, a work in verses derived from various sources.¹⁹⁴

NAPUṢSAKĀMṚTĀRṆAVA by Rāmaprasāda.¹⁹⁵ This work, a monograph on disorders of male sexual potency and their treatment, written in the form of a dialogue between a teacher and his pupil, is arranged in nine chapters (taraṅga): (1) napuṣsakanidānavarṇana (102 verses); (2) napuṣsakacikitsita (101 verses); (3) vājīkaraṇādicūrṇavarṇana (67 verses); (4) kāmoddīpakapākavarṇana or vājīkaraṇapākavarṇana (106 verses); (5) guṭīkārasādivarṇana or vājīkaraṇarasādivarṇana (115 verses); (6) tailasekalepādivarṇana or dhvajavikāranāśakatailādivarṇana (94 verses); (7) napuṣsakakāraṇatvena pramehavarṇanam (76 verses); (8) napuṣsakatve kāraṇatvena upadaṃśaphiraṇavarṇanam (56 verses); (9) uttamavājīkaraṇarasāyanayogavarṇana (66 verses).

Impotence (klaibya) is of seven main types (1.32): of mental origin (mānasa; 1.34); caused by pitta, provoked by the excessive ingestion of substances of a pungent, sour and salty taste (1.35); caused by a deficient amount of semen (śukrakṣaya; 1.36); caused by the application of substances thought to increase the size of the penis (1.37); caused by damage to the ducts transporting the semen (śīrācheda; 1.38); caused by retention of the seminal discharge (vīryastambhanimitta; 1.39); of hereditary origin (janmaprabhṛti; 1.40). Other types are those finding their origin in damage to the semen (bījopaghāta; 1.45–47), damage to the penis (dhvajabhaṅga; 1.48–60), old age (jarā; 1.61–64), various types of weakness (kṣaya; 1.65–70), and bad habits (kukarman; 1.71–73). The opinion of Yūnānī physicians (yāvanīyamata) on the aetiology of impotence is briefly described, according to information derived from Caube who lived in Mathurā (1.74–79). The classification of sexual disorders, as found in the *Suśrutasaṃhitā*, is also incorporated (1.80–88). The characteristics of curable and incurable types

of impotence are mentioned (1.89–91). The varieties of śukradoṣa are described (1.92–98).

Chapter two describes the treatment of impotence. Drugs suitable to this end (vṛ-ṣya) are of three types: śukrasrutikara (promoting ejaculation), śukravivardhana (increasing the amount of semen) and srutivṛddhikara (increasing the amount of ejaculated semen; 2.21).

Chapter three deals with powders (cūrṇa), chapter four with pākas, chapter five with pills (guṭikā) and rasas, useful for the treatment of impotence. Chapter six is concerned with oils (taila), fluids (seka) and unguents (lepa) suitable to the same purpose.

Chapter seven describes prameha, a disease leading to impotence, and the treatment of this disorder. The verses on the aetiology, symptoms, etc., of prameha are related to those found in the *Mādhavanidāna*.¹⁹⁶

Chapter eight deals with upadaṁśa and phiraṅga as causes of impotence, and the treatment of these diseases. The verses on upadaṁśa may be from the *Mādhavanidāna* again,¹⁹⁷ while those on phiraṅga are from the *Bhāvaprakāśa*.¹⁹⁸

Chapter nine contains some formulae for vājīkaraṇa and rasāyana purposes.

Some recipes are ascribed to particular authorities: the Aśvins (2.70–72; mahā-sugandhitaila; 9.39–50; mahākalkarasa), Dhanvantari (3.33–38; kāmadevacūrṇa), Vṛkodara (= Bhīma; 2.57–58; a rasālā), and a maternal uncle of the author, called Keśavānanda (8.34–42; uśavāvaleha).

The treatise was completed in 1908/09 (9.65).

NAVAPARIBHĀṢĀ by Upendranāthadāsa.¹⁹⁹

NAYANĀNANDABODHANĪ by Kālīcaraṇa, son of Rāmanidhi.²⁰⁰ This work deals with the treatment of eye diseases.

NIDĀNACIKITSĀHASTĀMALAKA²⁰¹ by Rājajitrāya Desā²⁰² is a textbook of pathology in nine chapters, partly in Sanskrit, partly in Hindī. The Sanskrit passages consist of quotations.

NITYOPAYOGIKVĀTHASAMGRAHA by Badrīnārāyaṇa Śarmā.²⁰³

PĀCANA AND MUṢṬIYOGA, compiled by Nagendranātha Sena Gupta.²⁰⁴

PĀCANASAMGRAHA, compiled by Haralāla Gupta.²⁰⁵

PADĀRTHAVIJÑĀNA by Satyanārāyaṇaśāstrin²⁰⁶ is a work in prose on a number of philosophical concepts and their application in medicine. The concepts dealt with are: padārthatva (1–20), dravya (21–31), prthvī (31–34), jala (34–35), tejas (35–37), vāyu (37–38), ākāśa (39–40), kāla (40–42), diś (42–44), guṇa (44–51), rūpa (51–54), rasa (54–56), sparśa (56–58), saṁkhyā (58–61), parimāṇa (61–64), prthaktva (64–65), saṁyoga (65–69), vibhāga (69–75), paratvāparatva (75–78), buddhi (78–83), svapna (84–103), vidyā (103–146), pratyakṣa (146–168), and anumāna (168–192).

Authorities and works quoted or referred to are: Annaṁbhāṭṭa's *Tarkasamgraha* (52, 106, 173, 174, 175, 177, 184), *baudhagrantha* (122), *baudhah* (121, 131,

141), *Bharadvājasamhitā* (16), *Bhāṣya* (4, 121, 187, 191),²⁰⁷ *Bhūṣaṇakāra* (10),²⁰⁸ *Cakra*(pāṇi) (17, 47), *Caraka* (15, 16, 18, 20, 109, 114),²⁰⁹ *Cintāmaṇi*(kṛt) (129, 172, 173, 177),²¹⁰ *Darpaṇakāra* (9),²¹¹ *Dharmarājādharvaṇḍra's Vedāntaparibhāṣā* (107),²¹² *Dīdhitikṛt* (101),²¹³ *Dinakarī* (50),²¹⁴ *Ekākṣarakoṣa* (9),²¹⁵ *Gadādhara*(bhāṭṭa) (5, 98),²¹⁶ *Gaṅgādhara* (45),²¹⁷ *Gautama* or *Gotama* (5, 8, 19, 81, 115, 116, 171, 190, 191), *Hari* (4), *Jagadīśa's Śabdaśaktiprakāśikā* (112),²¹⁸ *Jalpakaḷpataru* (46),²¹⁹ *Jatādhara* (19), *Jayantabhāṭṭa's Nyāyamañjarī* (116, 134, 135, 137, 138, 140, 168, 169, 181, 182),²²⁰ *Kaṇāda's Vaiśeṣikasūtra* (4, 11, 103, 104),²²¹ *Kaṇādarahasya* (52),²²² *Kapila* (19),²²³ *Kārikā* (10),²²⁴ *Kārikāvalī* (52),²²⁵ *kavayaḥ* (3), *Kāvyaprakāśa* (7),²²⁶ *Mādhyaṃikakārikā* (124),²²⁷ *mādhyaṃikāḥ* (121, 122, 131), *Mādhyaṃikavṛtti* (124),²²⁸ *Mahābhārata* (166), *Maharṣisūtra* (192),²²⁹ *Mañjūśā* (3),²³⁰ *mīmāṃsakāḥ* (6, 7, 9, 10, 18, 105, 111, 147, 152, 175, 176), *Nāgeśadīkṣita* (2),²³¹ *naiyāyikāḥ* (6, 7, 8, 9, 19, 57, 109, 147, 186), *navīnāḥ* (169), *navyāḥ* (4, 20, 39, 52), *navyanaiyāyikāḥ* (17), *Nīlakaṇṭha's* commentary on the *Mahābhārata* (165, 166), *Nyāya*(darśana, -sūtra) (19, 31, 78, 94, 108, 186),²³² *Nyāyalīlāvatīkṛt* (107),²³³ *Nyāyasiddhāntamañjarī* (6),²³⁴ *Pañcadaśīkṛt* (164),²³⁵ *Pāṇini* (5), *pāṭaṇjalāḥ* (109), *Patañjali* (15, 20–21, 44),²³⁶ *Prabhākara* (10, 11, 106),²³⁷ *prābhākaraḥ* (108), *prācīnāḥ* (174), *Prāñca* (2, 52, 53), *Prāśastapāda's Bhāṣya* (very often),²³⁸ *Rāmāyaṇa* (150), *Śālinātha's Prakaraṇapañcīkā* (106),²³⁹ *Sāṃkhya* (78, 114, 167), *sāṃkhyaḥ* (18, 161, 164), *Sāṃkhyatattvakaumudīkṛt* (163, 165, 166),²⁴⁰ *Saṃkaramiśra* (11, 30, 41, 68, 106),²⁴¹ *Sāramañjarī* (7),²⁴² *saugatāḥ* (121, 135), *sautrāntikāḥ* (121, 129, 130), *Śiromaṇi* (101),²⁴³ *Śrīdhara's Nyāyakandalī* (61, 68, 74, 82, 87, 106, 133, 141, 170),²⁴⁴ *śruti* (93, 94), *Sūktikāra* (49),²⁴⁵ *Suśruta* (15), *Sūtra* (188, 189, 190, 192), *Sūtrakṛt* (170, 178, 190, 191), *Tarkāmṛta* (52),²⁴⁶ *Udayana's Kiraṇāvalī* (11, 38, 40, 42, 61, 64, 69, 80, 81, 86, 96, 101, 104, 106),²⁴⁷ *Upaskāra* (42, 46),²⁴⁸ *Vācaspatimiśra* (5),²⁴⁹ *Vahniveśa* (16, 46),²⁵⁰ *vaibhāṣikāḥ* (121, 130, 131), *Vaiśeṣika(sūtra)* (11, 17, 31, 77, 103, 104, 108),²⁵¹ *vaiśeṣikāḥ* (17, 19, 20, 46, 47, 57, 109), *vaiyākaraṇāḥ* (3, 5, 9), *Vardhamānopādhyāya's Kusumāñjaliprakāśa* (42, 164),²⁵² *Vātsyāyana's Bhāṣya* (82, 183),²⁵³ *Vedānta* (20, 124), *vedāntināḥ* (89, 93, 147, 158, 164), *Viśvanātha's*²⁵⁴ (33, 171, 184, 190, 191) *Kārikā* (40, 66), *Muktāvalī* (1, 4, 9, 11, 27, 31, 32, 40, 104, 105, 109, 114, 143, 145, 146, 174), *Samgraha* (44), and *Vṛtti* (184, 187, 191), *vṛddhāḥ* (111), *Yaśomitra* (129),²⁵⁵ *Yogabhāṣya* (157), *Yogācāra* (97, 124, 129), *yogācārāḥ* (121, 123), and *Yogasūtra* (12, 148).

PAÑCABHŪTAVIJÑĀNA by Upendranāth Dās.²⁵⁶

PAÑCALAKṢAṆANIDĀNA by Duraisvāmin Aiyangār.²⁵⁷

PARIBHĀṢĀPRABANDHA by Jagannāthaprasāda Śukla.²⁵⁸

This treatise, written in Sanskrit and Hindī, consists of fifteen chapters (prakaraṇa). Subjects dealt with are: weights and measures, pharmaceutical preparations, groups of drugs, prepared dishes, actions of drugs, the saṃskāras of rasaśāstra and other alchemical subjects, pañcakarma, etc.

PRAMEHACIKITSĀMAṆI by P. Rāmacandra Rāvu.²⁵⁹

PRAMEHADUḤKHAḬHANA, compiled by Sītārāma Joṣī, son of Gopīrāma.²⁶⁰
PRĀṆATOṢAṆA by Gaṇapatiśāstrin.²⁶¹

PRATĀPAKAṆṬHĀBHARAṆA²⁶² by Kavirāja Pratāpasimha,²⁶³ in 602 verses, is a work consisting mainly of maxims relating to a virtuous way of life; part of the verses are on svasthavṛtta.

PRATYAKṢĀŚĀRĪRA²⁶⁴ by Gaṇanāthasena²⁶⁵ is an illustrated textbook of modern anatomy in Sanskrit prose.²⁶⁶ Numerous new technical terms, coined by the author, are found in this work.

The *Pratyakṣa(śārīra)* is quoted in Gaṇanāthasena's commentary on his own *Siddhāntanidāna*.

PRIYANIGHAṆṬU²⁶⁷ by Priyavrata Śarman²⁶⁸ is a work on the names and properties of a large number of medicinal plants. Noteworthy are the descriptions of plants found in this treatise. The 638 verses, composed by the author himself, are couched in an elegant Sanskrit. The work is divided into four chapters (varga): harītakyaḍivarga (251 verses; 115 items), pippalyādivarga (80 verses; 38 items), śatapuspādivarga (213 verses; 114 items), and dravyādivarga (94 verses). Chapter four does not describe drugs, but deals with the basic concepts of pharmacology and defines a series of actions of drugs. The botanical name of each plant described has been added by the author.

Noteworthy items are: ākarakarabha (3.52),²⁶⁹ arkaparnī (2.29),²⁷⁰ aśvagola (3.64),²⁷¹ bhūdugdhikā (3.127),²⁷² dārusitā (1.88–91),²⁷³ dvīpāntaravacā (3.51),²⁷⁴ gorakṣa (1.215),²⁷⁵ gorakṣagañjā (3.87),²⁷⁶ haimavatī (3.48),²⁷⁷ jayapāla (3.60),²⁷⁸ karañjadvaya²⁷⁹ and -traya²⁸⁰ (1.214), kṛṣṇabīja (3.63),²⁸¹ kulañjana (3.49–50),²⁸² māyāphala (3.80),²⁸³ nāhī (3.138),²⁸⁴ nālukā (1.88–91),²⁸⁵ two types of pañcatikta (1.183–184), parñayavānī (3.17),²⁸⁶ pūtiḥā (3.23),²⁸⁷ sadampuspā (3.211),²⁸⁸ somakalpa (3.129),²⁸⁹ svarṇpatrī (3.62),²⁹⁰ tuvaraka (1.132),²⁹¹ vacācatuṣṭaya (3.44),²⁹² vana-trapuṣikā (3.212),²⁹³ and yavānītritaya (3.16).²⁹⁴

The *Priyanighaṇṭu* is quoted in the auto-commentary on the author's *Dravyaguṇasūtra*.

PŪTANĀŚĀNTI by Śivamaṅgala Dvivedin.²⁹⁵
RĀJYAKṢMĀ by Viśveśvaradayaḷu Vaidyarāja.²⁹⁶

RĀMANIDĀNA or *Rāmarddhisāra* by Rāmalāla.²⁹⁷ This treatise deals with nidāna in 712 verses. The author was a Jain monk, living in Bīkāner, and belonging to the Jinadattasūri śākhā of the Kharataragaccha; he was a pupil of mahopādhyāya Dharmasīla.²⁹⁸

ROGAVINĪŚCAYA by Yāminībhūṣaṇa Rāya.²⁹⁹

ROGIMṚTYUVIJÑĀNA by Mathurāprasāda Dīkṣita,³⁰⁰ a treatise on arīṣṭas (signs indicating the approach of death in a patient).

The work is divided into ten chapters (adhyaḥ): (1) sixty-four verses on generalities concerning aṛiṣṭas (3–14) and aṛiṣṭas pertaining to observations of the physician; (2) twenty-four verses on aṛiṣṭas pertaining to experiences of the patient; (3) fifty-seven verses on inauspicious dreams and changes in the chāyā; (4) thirty-seven verses on various aṛiṣṭas; (5) forty-five verses on various aṛiṣṭas; (6) eighteen verses on aṛiṣṭas indicating that the patient will die very soon; (7) twenty-seven verses on aṛiṣṭas indicating death within a specified period of time; (8) fifteen verses on omīna relating to the messenger; (9) thirteen verses on omīna occurring on the way of the physician to the patient's house and on entering it; (10) thirty-two verses on auspicious dreams.

Sources mentioned are Caraka, Suśruta, Vāgbhaṭa, and the *Bhāvaprakāśa* (1.2).

SAṂJÑĀPĀṆCAKAVIMARŚA by Gaṇanāthasena.³⁰¹ The author discusses in this work the meaning of the terms (1) peṣī and snāyu, (2) kalā, (3) sirā and dhāmānī.

ŚĀRĪRAPARIBHĀṢĀ by Gaṇanāthasena.³⁰²

ŚĀRĪRATATTVADARŚANAM NĀMA VĀTĀDIDOṢAVIJÑĀNAM by Puruṣottam Śāstrī Hirlekar and Harihar Śarmā.³⁰³

ŚĀRĪRAVIJÑĀNA, compiled by Nīśikānta Vaidya Śāstrin.³⁰⁴

SARVAUṢADHIPADĀRTHADARPAṆA, compiled by M. Vīrayasiddhāntin.³⁰⁵

ṢAṬKARMAŚĀSTRA by Jagadīśācārya.³⁰⁶

This interesting treatise, in Sanskrit sūtras, accompanied by a Sanskrit commentary, deals with six basic therapeutic procedures.

The work is divided into sixteen chapters (mayūkha): (1) karmasaṁkhyāviññānīya (14 sūtras); (2) trividhadoṣāpattivijñānīya (34 sūtras); (3) pūrvakarmavijñānīya (26 sūtras); (4) sarvakarmavidhivijñānīya (53 sūtras); (5) sarvakarmakramavijñānīya (11 sūtras); (6) samyaksnigdhatvādīlakṣaṇavijñānīya (32 sūtras); (7) sarvakarmavyāpattaccikitsāsūtravijñānīya (12 sūtras); (8) karmayogyāyogyavijñānīya (19 sūtras); (9) snehabhedasnehanavidhivijñānīya (40 sūtras); (10) svedanabhedasvedanavidhisūtravijñānīya (19 sūtras); (11) vamanavirecanadravya-tadvidhāna-vega-bala-śu-ddhi-virecanabhedavijñānīya (35 sūtras); (12) prāṇasvarūpabastikarmavijñānīya (71 sūtras; this chapter is the mayūkharāja); (13) nasyakarmavijñānīya (18 sūtras); (14) raktamokṣaṇabhedatadvidhānavijñānīya (16 sūtras); (15) uttarabastivijñānīya (19 sūtras); (16) sarvakarmāśeṣavidhivijñānīya (108 sūtras; this chapter is the mahāmayūkha).

Chapter one defends the unorthodox thesis that not five, but six basic therapeutic procedures should be recognized: vamaṇa (emesis), virecana (purgation), nasya (the application of errhines), anuvāsaṇa (oleaginous clysters), nirūhaṇa (non-oleaginous clysters), and visrāvaṇa (bloodletting). The view that the five procedures, usually called pañcakarman, are sufficient is rejected. The author also refutes the opinion that pañcakarman consists of vamaṇa, virecana, basti, nasya and raktamokṣaṇa, because this would imply that anuvāsaṇa and nirūha have the same effects. A third theory,

holding that snehana, svedana, virecana, basti and visrāvaṇa constitute pañcakarman, is just as little acceptable, because snehana and svedana belong to pūrvakarman, i.e., procedures preceding those belonging to pañcakarman.

Chapter two deals with the following topics: śaṭkarman should only be resorted to when laighana, followed by dīpana and pācana, have proved unsuccessful (2.2–4); śaṭkarman is effective against sroto'varodha (blockage of channels) (2.5), the essential feature of which is khavaiguṇya (2.6); kha (= ākāśa) is never subject to disorders, due to its subtleness (saukṣmya) (2.7); khavaiguṇya is actually caused by the paramāṇus of the other four mahābhūtas, mixed with those of kha; khavaiguṇya is therefore an upalakṣaṇa and denotes a svadharmakarmavaiguṇya of the channels (srotas) (2.8); khāvarodha is therefore essentially sroto'varodha (2.9); the finest channels are called caramasrotas (2.10); an intermediate group, called madhyasrotas, consists of the channels called keśikā,³⁰⁷ sirā and dhamaṇī, together with those transporting lasikā, rasa, śukra, sveda, pitta, mūtra, śvāsa, etc. (2.11–12); the big channel stretching from the lips to the anus is the mahāsrotas (tractus digestivus) (2.13); it is divided into seven parts: anna-nalikā (oesophagus), āmāśaya, grahaṇī, ubhayāntara (small and large intestine), malāśaya (rectum) and guda (anus) (2.14); the channel carrying śvāsa (tractus respiratorius) consists of: nāsā (nose), āśya (oral cavity), svarayantra (larynx), mahāśvāsapraṇālī (trachea), śvāsapraṇālī (bronchi), śvāsamandira (the alveoli), and śvāsakoṣṭha (the pleura) (2.15); the channel carrying mūtra (urine) consists of: mūtraṇaṇaka, mūtrakulyā (the tubuli), mūtrakōṣṭha, the two mūtragavīnīs (ureters), mūtrāśaya (bladder), śiśna (penis), and śiśnaveṣṭana (prepuce) (2.16); the channel carrying śukra (seed) consists of: śukraṇaṇaka, śukrakulyā, śukrakōṣṭha, śukrapraṇālī (funiculus spermaticus or ductus deferens), śukrāśaya (glandula vesiculosa?), aṣṭhīlā (prostate), and śiśna (penis); in females, the yonikalās take the place of the śukrāśaya (2.17); the other channels are divided similarly (2.18); according to modern science, the structures called caramasrotas are the same as the chidras of the seven dhātus (2.19); this view is rejected (2.20–21); the development of sroto'varodha is discussed; the concept of vṛddhi of the doṣas is explained; excessive vṛddhi leads to sroto'varodha (2.22–24); local vṛddhi can be cured by means of laighana (2.25); prakopa and prasara are dealt with (2.26–27), followed by the circulation (caṅkramaṇa) of blood and rasa (2.28); sthānasaṁśraya is the stage in which the prodromes appear (2.29); vyakti is the stage in which the symptoms appear (2.30); saṁprāpti (2.31) and bheda (2.32) are discussed; neglect of these pathogenetic processes results in conditions necessitating treatments belonging to (śaṭ)karman (2.33–34).

Chapter three deals with: vamaṇa and nasya are indicated in kapha disorders, virecana in pitta disorders, nirūhaṇa and anuvāsaṇa in vāta disorders (3.1–3); the seats of kapha, pitta and vāta (3.4–7); the aim of (śaṭ)karman consists of the elimination of the doṣas after making them collect in the koṣṭha (3.8–13); the doṣas can only be brought to the koṣṭha in a fluid state (3.14); fluidity is brought about by svedana (3.15–16), but completion of this process requires snehana, which results in mārḍava (softening), vighaṭana (breaking apart) and vilayana (liquefaction) (3.17–18); the dosis of sneha should be increased in disorders caused by blood (3.19–22); dīpana and pācana measures (3.23); the sneha used in snehana should always be prepared by mṛdupāka (3.24);

dīpana and pācana are, according to some, procedures belonging to pūrvakarman (3. 25–26).

Chapter four is about general rules for dīpana, pācana, svedana, snehana, nirūha, anuvāsana and raktamokṣaṇa.

Chapter five gives a summary of the six procedures and their order.

Chapter six deals with: the signs indicating that the patient has properly been treated with snehana (6.1–2); the signs of inadequate and excessive snehana (6.3–4); the same groups of signs regarding svedana (6.5–7), vamaṇa (6.8–11), virecana (6. 12–14), the application of nirūhaṇa (6.15–17), anuvāsana (6.18–20), nasya (6.21–23), visrāvaṇa (6.24–26), uttarānuvāsana (6.27–29), and uttarāsthāpana (6.30–32).

Chapter seven is concerned with vyāpad. No conditions called vyāpad arise due to dīpana and pācana (7.1). The vyāpads of snehana are enumerated and their treatment is discussed (7.2–3), followed by those of svedana (7.4–5), vamaṇa and virecana (7.6), nirūha (7.7), anuvāsana (7.8), nasya (7.9), visrāvaṇa (7.10), and uttarabastī (7.11). The last sūtra deals with the relationships between the vyāpads and the doṣas (7.12).

Chapter eight discusses indications and contra-indications for shehana, etc.

Chapter nine deals with: dīpanapācana is of two kinds: external (bāhya) and internal (ābhyantara) (9.1); the external type consists of vyāyāma, dhāvana (running), etc., the internal type of kṣāras (caustics), lavaṇas (salts), and all procedures which rouse pitta (9.2–3); snehas are either sthāvara or jaṅgama (9.4); the sthāvara snehas are oils from various plants, the jaṅgama ones consist of ghee, milk, dadhi, fresh butter, muscle fat, and bone marrow (9.5–6); seeds, etc., are the sources of oils (9.7); oils should be administered in the rainy season, ghee in the autumn, muscle fat and bone marrow in the month of Mādhava (9.8); the relationships between these fatty substances and the doṣas (9.9); ghee, and medicines prepared with it, are the very best (9.10); yet, when vāta is very strong, an oil is to be prescribed, etc. (9.11); or, as an alternative, a ghee, etc., prepared with drugs counteracting vāta, etc. (9.12); these snehas should be administered when it is neither too hot nor too cold (9.13); or, when the weather is hot, during the night, and, when the weather is cold, during the day; a sneha has to be administered when the sky is cloudless (9.14); disorders arising when these rules are not observed (9.15–16); a yūṣa should be drunk after the administration of an oil, tepid water after a ghee, a peyā should be given after the administration of muscle fat, a maṇḍa after bone marrow (9.17); or, after a sneha of whatever type, tepid water should be drunk, not once, but repeatedly (9.18); cold water is the required drink (anupāna) after the oil of tuvaraka or bhallātaka (9.19); the dose of the sneha depends on the activity of the digestive fire; three grades are distinguished: persons digesting the sneha within six, twelve or twenty-four hours (horā) have a sluggish, moderately active or keen fire (9. 20); the required doses are half a pala, three quarters of a pala, and a pala respectively (9.21); the smallest dose is the best one (9.22); the treatment should be continued for three, five or seven days, depending on the type of koṣṭha of the patient: mṛdu, madhya or krūra (9.23); snehana is of two types: internal or external (9.24); the internal type consists of acchapeya and vicāraṇā (9.25); the external type consists of lepa, abhyaṅga and udvartana (9.26); the physicians of Kerala add pādāghāta as a fourth type (9.27),³⁰⁸ one dose is drunk in acchapeya (9.28); taking a sneha together with boiled rice or other

substances is called vicāraṇā (9.29); twenty-four varieties of vicāraṇā can thus be distinguished (9.30); vicāraṇā is suitable to those disgusted by a pure sneha (9.31); doses which are too small or too large should be avoided (9.32); a sneha to which a salt has been added acts quickly (9.33); the sneha is not yet digested when the eructations are smelling (9.34), but digested when they are devoid of smell (9.35); when the procedure leads to a very strong activity of the digestive fire, the patient should only drink cold water; otherwise, he would die (9.36); a ghee should never be given pure, but always prepared (with drugs) (9.37–38); even a prepared ghee should never be prescribed in a pitta disorder (9.39); such a disorder requires a combination of two, three or four kinds of sneha (9.40).

Chapter ten deals with: the two groups of sveda: with the help of fire (agnisveda) or without it (10.1); the ten types of sveda without the use of fire: vyāyāma (physical exercise), uṣṇaḡra (a warm room), guruprāvaraṇa (warm clothing), kṣudhā (hunger), bhaya (fear), krodha (anger), āhava (fighting), ātapa (the warmth of the sun), bahupāna (drinking much), and upanāha (poultices) (10.2); these types are suitable to delicate persons and when pitta disorders are present (10.3); sveda by means of fire consists of tāpa-, upanāha-, drava-, ūṣma-, and bāśpasveda (10.4); tāpasvedais divided into prastara- and saṃkarasveda (10.5); the materials to be used for the piṇḍas of tāpasveda in disorders caused by kapha and vāta (10.6); the materials for upanāhasveda and its technique (10.7); dravasveda, consisting of avagāha and pariśeka, is indicated in disorders where pitta predominates, in combination with either vāta or kapha (10.8); the types of ūṣmasveda are: holāka-, kūpa-, kuṭī-, karṣu-, and jentākasveda (10.9); the types of bāśpasveda are: nāḍī-, kumbhīka-, āsmaghana-, and bhūsveda (10.10); the fourteen types of agnisveda are indicated in vāta and kapha disorders (10.11); sveda may be applied to the whole body or a part of it (10.12); sveda is either rūkṣa or snigdha; rūkṣasveda, carried out by means of heated stones, sand, etc., is indicated in kapha disorders; snigdhasveda, consisting of prastarasveda, avagāha, etc., is indicated in vāta disorders (10.13); when a doṣa has moved to the seat of another doṣa, the doṣa normally seated there should be counteracted first, subsequently the doṣa that has moved (10.14); sveda is of three types, divided into strong, moderate and weak sveda (10.15); weak sveda should be applied to the testicles, eyes and cardiac region (10.16); moderate sveda may be applied to the region of the groins (10.17); strong sveda or any degree required may be applied to other places (10.18). The chapter ends with a quotation from the *Carakasamhitā*.

Chapter eleven deals with: virecana as a term covering both vamaṇa and virecana sensu stricto (11.1); drugs belonging to the madanaphalādigaṇa are used as emetics (11.2), those belonging to the trivṛdādigaṇa as purgatives (11.3); the properties on which their effects are based (11.4); fire and air predominate in emetics, water and earth in purgatives (11.5–6); drugs which are of the nature of all four elements act both ways (11.7); emetics should be given together with honey and salt; tepid water, mixed with liquorice juice, is the appropriate anupāna (11.8); drugs to be prescribed when the usual emetic does not work (11.9); three grades of purification by means of emesis are distinguished, characterized by eight, six and four bouts (vega) of throwing up (11.10); their effects on the patient's strength (11.11); specifications regarding the three grades: the

eight bouts consist of four bouts connected with kapha, two with pitta and two with vāta; the six bouts consist of four connected with kapha and two with pitta; the four bouts are only kapha bouts (11.12); the highest grade (pradhānaśuddhi), as it has been described, is indicated when a large amount of doṣas is involved (11.13); pradhānaśuddhi is reached in cases with a moderate amount of doṣas by means of six bouts; three of these are connected with kapha, two with pitta and one with vāta (11.14); similarly, pradhānaśuddhi is reached in cases with a small amount of doṣas by means of four bouts; two of these are connected with kapha, and one each is connected with pitta and vāta; this series of four bouts should not be confused with the lowest grade of the standard series (11.15); with respect to the three grades, the amount thrown up should be two prastha, one prastha, and half a prastha respectively (11.16); specifications regarding the middle and low grades of purification in cases with a large, moderate and small amount of doṣas (11.17); the effects on the patient's strength of all these distinct types (11.18); the gradations of the procedure have thus been described (11.19); an increase of temperature (tāpa), caused by excitement of pitta, is characteristic of the arrival of a bout of vomiting (11.20); madanaphala is the best emetic (11.21); preparations to be administered prior to the emetic (11.22); the emetic should be given on an empty stomach; the patient may only take some yavāgū or ghee (11.23); the morning is the most suitable time (11.24); an emetic works without being digested; for that reason one should give a second dose when the effect is not quickly produced (11.25); however, this second dose should not be administered until the first one has been digested (11.26); the patient should fast for some time when the dose proved to be too small (11.27); purgation is indicated when the dose was too large (11.28); the drugs suitable to be used for purgation; they should be given about noon (11.29); complete purification will be reached after thirty, twenty or ten bouts, dependent on the three grades (11.30); as a result, the temperature will drop, due to the decrease of pitta (11.31); the amount of doṣas expelled should be four, three or two prastha (11.32); this purgation is of four types: anulomana, sraṇsana, recana or bhedana (11.33); persons who are krūrakoṣṭha are not easily purged and should be given an anuvāsana (11.34); purgatives suitable to delicate persons (11.35).

Chapter twelve, a long one, is called mayūkharāja because it deals with basti, which is the chief one among the six basic procedures (12.1): basti consists of the application of decoctions, oils, etc., by way of the anus, vagina or urethra (12.2); a basti is called thus because the bladder (basti) of an animal is used in this procedure (12.3); basti is of three types, according to the three ways of administration (12.4); it is of two types according to the fluid used: a basti with a decoction (kaṣāya) is a kaṣāyabasti, nirūha or āsthāpana, a basti with a fatty substance is a snehabasti or anuvāsana (12.5); three types are distinguished according to the dose; a mātrābasti contains a prasṛta of a fatty substance, an anuvāsana three prasṛta; a nirūha contains twelve prasṛta of a decoction (12.6); six types are distinguished according to the effect aimed at: utkleśanabasti, lekhanabasti, śodhanabasti, śamanabasti, bṛṇḥanabasti, vṛṣyabasti, rasāyanabasti, and śukrastambhanabasti; they should be administered in the mentioned order; a stambhanabasti is also indicated in cases of atīśāra, raktātīśāra, and the downwards moving type of raktapitta (12.7); a śamanabasti is vāta-, pitta- or kaphaśamana (12.8); basti is

of nine types according to the place of the body where a disorder is located: śiro-, pārśva-, prṣṭha-, udara-, uro-, kaṭi-, guda-, yoni-, and mūtrabasti (12.9); apart from the last three, these bastis are of the snehabasti type (12.10); the last three may be either of the anuvāsana or of the āsthāpana type (12.11); in children up to the twelfth year the dose of a nirūha increases by half a prastha each year, beginning with half a prastha in the first year (12.12); subsequently, the dose increases with one prastha each year up to the eighteenth year of life (12.13); the appropriate dose for persons older than seventy is the same as that for those sixteen years old, i.e., ten prāṣṭa (12.14); the dose of an anuvāsana is always one quarter of that of a nirūha (12.15); the dose of a mātṛabasti varies in the same way as that of an anuvāsana (12.16); the rule for the ratios of the ingredients of a nirūha; this rule does not apply to a kṣīrabasti (12.17); the fluids in a mādhutailikabasti are a quarter less in amount; its dose consists of nine prastha (12.18); the ratio of the fatty substance in a nirūha varies according to the doṣa mostly involved in the disorder (2.19); the ratio of the honey varies inversely (12.20); the remaining ingredients do not vary (12.21); the salt should be ground, mixed with the honey, and then added to the fatty substance (12.22); after this, one should add the decoction, subsequently the guda and the kalka, then stir the mixture with a churning stick (khaḍja) (12.23); one should fill the pouch with the tepid or warm mixture, lubricate the tube, and introduce it (12.24); the patient should lie on his left side (12.25), stretch his left leg and pull up his right knee (12.26), while breathing slowly (12.27); sneezing, hiccupping and coughing should be suppressed (12.28); the fluid should not be introduced hurriedly (12.29); a remnant should be left in the pouch in order to prevent that air is compressed inside (12.30); breaking of the fluid will not take place when it has properly been stirred (12.31); abhyaṅga and svedana of the belly are indicated when air has got inside (12.32); the physician should press the buttocks of the patient after administration of a clyster; the patient should pull up both knees and then stretch his legs five to seven times (12.33); a nirūha should remain inside for a muhūrta (12.34); an anuvāsana should remain twice to four times as long (12.35); after elimination of the fluid, the anal region should be sprinkled with tepid water (12.36); when the remnant has not come out at the proper time, a purgative clyster should be given (12.37); the patient should bathe and take some food; the type of food that is appropriate depends on the main doṣa involved (12.38); the ratios of the ingredients in an anuvāsana (12.39); an anuvāsana should be administered in the evening, after a light midday meal has been digested (12.40); the proper amounts of salt and decoction should be taken (12.41); too much of the decoction will make the fluid come out too soon; too much salt will give rise to a burning sensation and diarrhoea (12.42); disorders brought about when the fluid is too warm, too cold, or too much irritating (tīkṣṇa) (12.43); disorders arising when the fatty fluid has not properly been boiled (12.44); a cold clyster is indicated in diseases caused by pitta (12.45); requirements for the couch (12.46); a mātṛabasti for br̥ṇīhaṇa purposes should be given daily; other types are to be administered according to what is taught about them, dependent on the specific circumstances (12.47); periods of time suitable to the administration of an anuvāsana (12.48); the intervals should be twice as long as for a nirūha (12.49); things to be avoided by the patient during the course of treatment (12.50); the success of the treatment depends on a proper consideration of the doṣa(s)

involved, the qualities and actions of the drugs used, etc. (12.51); one or three anuvāsanas are required in disorders caused by kapha, five or seven in those caused by pitta, nine or eleven in those caused by vāta (12.52); the specific effects of the first to ninth anuvāsana (12.53); in cases of śukradoṣa the number of anuvāsanas should be doubled (12.54); causes for failure of the treatment (12.55–57); requirements for the pouch (12.58); substitutes for the leather of the pouch (12.59); nowadays, rubber is used for the pouch and iron for the tube (12.60);³⁰⁹ the tube may also be made from gold and other metals (12.61); requirements for the tube (12.62–63); the dimension of the tube when employed for the administration of a clyster to children of various ages (12.64–65); the tube should possess three bulbous protrusions (kaṇṭikā) (12.66); two kaṇṭikās serve to fasten the tube to the pouch; one kaṇṭikā, in the middle, prevents the introduction of too long a part of the tube (12.67); the dimensions of the opening in the tube (12.68); defects of the opening (12.69); defects of the pouch to be avoided (12.70). The chapter ends with two verses in praise of basti.

Chapter thirteen deals with: the three types of nasya: śodhana-, bṛṃhaṇa- and śamananasya (13.1); the difference between the types called pradhamaṇa and avapīṇaṇa (13.2); the differences between a rūkṣa and a snigdha nasya; the former consists of a powder, the latter of a fatty substance in which drugs have been boiled (13.3); disorders with a large amount of doṣas, particularly kapha, require pradhamaṇa with a rūkṣa and śodhana powder (13.4); vāta disorders require a snigdha nasya (13.5); nasyas are of three types according to the dose employed: bindumātra, pratimarśa and marśa; their doses are one bindu (drop), two bindu, and six to a hundred bindu respectively (13.6); a bindumātra is given once, a pratimarśa twice, a marśa three times daily (13.7); the period of time for the administration depends on the main doṣa involved: the morning in case kapha, the afternoon in case pitta, the evening in case vāta is involved (13.8); the proper season depends on the same type of considerations (13.9); rules for a śodhana nasya (13.10); the proper position of the patient (13.11); the ways of administering a powder and a fluid (13.12); a nasya may be given during the night when a doṣa has extremely increased (13.13); the number of drops should be eight, six or four, dependent on the strength of the patient (13.14); a nasya should not be given to children under eight years of age (13.15), neither to persons older than eighty (13.16); Sūruta's rules for the use of pratimarśa in the healthy (13.17); the sneha for a nasya should be prepared by madhyapāka (13.18).

Chapter fourteen deals with: the five types of bloodletting;³¹⁰ by means of a horn (śṛṅga), leeches, or a gourd (alābu), scarification (pracchāna) by means of a lavitra,³¹¹ and phlebotomy (14.1); these methods are indicated in disorders by vāta, pitta and kapha, in local disorders due to the three doṣas, and in general disorders respectively (14.2); the amount of blood to be drawn in vāta, pitta and kapha disorders (14.3); alternatively, all the doṣas may be eliminated by each of the methods mentioned (14.4); the maximum amount that may be drawn by each of the methods (14.5); the etymology of jalaukas (leech) (14.6); the names of the six poisonous and the six non-poisonous leeches (14.7); the way of drawing blood by means of leeches (14.8); the signs indicating that leeches have completed sucking corrupted blood (14.9); sprinkling with salt makes a leech let go (14.10); one should make the leeches vomit

the corrupted blood ingested; otherwise, they would develop the disease called rakta-mada (14.11); the wound should be treated with śatadhautaghrta³¹² (14.12); sprinkling cold water over it will help when the bleeding does not stop (14.13); bloodletting is difficult in cold weather (14.14); warm weather leads to profuse bleeding (14.15); bloodletting should therefore be avoided under these circumstances (14.16).

Chapter fifteen deals with: uttarabastis are generally snehabastis (15.1–2); the nirū-ha type is also used (15.3); the suitable position for a male patient (15.4); an āsthāpana should precede an uttarabasti (15.5); the bladder should be emptied (15.6); the patient should bathe and take as food either a broth or milk (15.7); the suitable position for a female patient (15.8); the dose is half a prasṛta when the patient is eighteen years (or older), a quarter of a prasṛta when the patient is twelve (15.9); the dose for a vaginal uttarabasti is a prasṛta (15.10); it should not be used in children (15.11); a vaginal uttarabasti should be administered when the menstrual period has ended (15.12); requirements for the tube for a vaginal uttarabasti (15.13); requirements for the tube for an urethral uttarabasti in adults (15.14) and in children (15.15); the lengths of the tube for males, females and children (15.16); the dimensions of the opening (15.17); the tube should possess a kaṇṭhikā (15.18); the amounts of decoction and fatty substance to be used (15.19).

Chapter sixteen, the mahāmāyūkha, deals with: the explanation of the title mahāmāyūkha (16.1); rules for the treatment of vāta diseases (16.2); lepa (16.3); abhyaṅga (16.4); udvartana (16.5); pādāghāta (16.6); sadyaḥsnehana (16.7); śirobasti (16.8); pr-ṣṭha-, pārśva-, uro-, kaṭi-, and udarabasti (16.9); śirodhārā (16.10); takradhārā (16.11); dhānyāmladhārā (16.12); kaṇṭhapūraṇa (16.13); āścyotana (16.14); gaṇḍūṣa (16.15); a-ñjana (16.16); nasya (16.17); sarṅkarasveda (16.18); snigdhataralapiṇḍasveda (16.19); ṣaṣṭīśālipiṇḍasveda (16.20); godhūmapiṇḍasveda (16.21); śālvaṇapiṇḍasveda (16.22); pattropiṇḍasveda (16.23); prastarasveda (16.24); upanāhasveda (16.25); pattropanāhasveda (16.26); śālvaṇopanāhasveda (16.27); avagāhasveda (16.28); pariṣekasveda (16.29); snehadhārāsveda (16.30); holākoṣmasveda (16.31); kūpoṣmasveda (16.32); kuṭṭisveda (16.33); karṣusveda (16.34); jentākasveda (16.35); nāḍīsveda (16.36); kumbhīkasveda (16.37); āsmaghanasveda (16.38); bhūśveda (16.39); anagnisveda (16.40); vamaṇa (16.41); virecana (16.42); bastikrama (16.43); utkleśanabasti (16.44); lekhanabasti (16.45); śodhanabasti (16.46); śamanabasti (16.47); br̥mhaṇabasti (16.48); vṛṣyabasti (16.49); śukralarāsāyanabasti (16.50); śukrastambhanabasti (16.51); vājīkaraṇabasti (16.52); picchābasti (16.53); balyapicchābasti (16.54); grāhibasti (16.55); vandhyātvaghnabasti (16.56); madhutailabasti (16.57); yuktarathabasti (16.58); siddhabasti (16.59); guḍūcisiddhabasti (16.60); yāpanabasti (16.61); kṣīra-basti (16.62); śītabasti (16.63); vātagnabasti (16.64); kuṣṭhagnabasti (16.65); kṛmighnabasti (16.66); mūtrakṛcchragnabasti (16.67); anuvāsanabasti (16.68); mātrābasti (16.69); anuvāsanārhaṣaṭyāditailas (16.70); āsthāpanatailas (16.71); sarva-roghararāśnāditailas (16.72); vātādighnabasti (16.73); yathākālabalabasti (16.74); uttarānuvāsanāsthāpana (16.75); snehabhāga in nirūhaṇa (16.76); taikṣṇyakṛddravayas (16.77); mārḍavakaradravyas (16.78); pradhamananasya (16.79); br̥mhaṇanasya (16.80); svarasanasya (16.81); avapīḍanasya (16.82); samjñāprabodhananasya (16.83); maricādinasya (16.84); br̥mhaṇanasya (16.85); vairecanikadhūmanasya (16.86);

na copagiled asamarthaḥ (a nasya should not be swallowed) (16.87); raktamokṣaṇa (16.88); uttarabasti (16.89); picudhāraṇa (16.90); the preparation of odana (16.91), vilepī (16.92),³¹³ yavāgū (16.93),³¹⁴ sūpa (16.94),³¹⁵ śāka (16.95), yūṣa (16.96), kāmālika (16.97), khada (16.98),³¹⁶ saktu (16.99), peyā (16.100), and māṃsarasa (16.101); kṛtākṛtayūṣa (16.102); gandharvahastādigāṇa (16.103); kākolyādigāṇa (16.104); vidārigandhādigāṇa (16.105); āragvadhādigāṇa (16.106). Two concluding sūtras end this chapter and the whole treatise.

The treatise is said to consist of 527 sūtras.

The author, of Citraguptagotra, was a pupil of Raghunāthaśarma, Muralīdharamiśra and Lālacandravaidya; he resided at Mahiṣīgrāma.³¹⁷

SIDDHABHAIŚAJYAMAÑJŪŚĀ³¹⁸ by Jayadeva Śāstrin³¹⁹ is a treatise that carries on the tradition of medical kāvyas, such as the works of Lolimbarāja. It shows the influence of Kṛṣṇarāma's *Siddhabheṣa jamañimālā*, quoted in the commentary. The work is written in verses of various metres,³²⁰ composed by the author himself.

The first volume (prakṣṭha), the only one published, contains 634 verses, divided into four chapters (koṣṭhaka). Chapters two to four are subdivided into adhikāras.

Chapter one is of an introductory nature. Chapters two to four are devoted to the treatment of diseases, beginning with jvara and ending with apasmāra. The order adopted is that of the *Mādhavanidāna*. The modes of treatment described derive from āyurvedic treatises, works on rasaśāstra, Islamic medicine, and western medical textbooks.³²¹ Religious elements are also present in Jayadeva's therapy.³²² Sources are rarely quoted or referred to.³²³

The *Siddhabhaiśajyamañjūśā* is quoted in Guṛārjśarmamiśra's commentary on the *Āyurvedaprakāśa* and Yādavjī Trikamjī's *Rasāmṛta*.

Some diseases described are known from late āyurvedic treatises, e.g., muktājvara (jvara 46, 48, 50, 53),³²⁴ or have been borrowed from western medicine, such as āntrikajvara (jvara 46, 48),³²⁵ daṇḍakajvara (jvara 72),³²⁶ mastiṣkamūlāmaya (jvara 93),³²⁷ sandhikajvara (jvara 72), śleṣmakajvara (jvara 56, 72),³²⁸ and śvasanaka (jvara 55, 57, 72).³²⁹ Another type of fever mentioned is masūrījvara (jvara 90). Terms borrowed from western medicine are jīvāṇu (micro-organism; jvara 55) and sūcikriyā (injection; agnimāndya 51).

The materia medica presents a large number of unusual substances, found only in late medical treatises, or derived from Islamic, occasionally from western medicine.

Examples are: aileyā (jvara 71),³³⁰ akaravī (jvara 82), ālūvakhārāphala (tṛṣṇā 1),³³¹ aruṇamarica (agnimāndya 43),³³² bhīmasenākhyakarpūra (agnimāndya 19),³³³ cāsakū (arśas 22),³³⁴ chikkā (atisāra 47),³³⁵ darūnaja (jvara 82),³³⁶ gandhinī (hikkā 6),³³⁷ gundrikā (raktapitta 5),³³⁸ hāraśṛṅgāra (jvara 131; arśas 6),³³⁹ hauṇī (arśas 20),³⁴⁰ iṣṭkāśnuhī (kāsa 5),³⁴¹ iṣpagola (kāsa 18),³⁴² iṣvarabola (atisāra 12 and 46),³⁴³ jadavāraka (jvara 81),³⁴⁴ jaharamoharā (jvara 82),³⁴⁵ jaharāśman (tṛṣṇā 1),³⁴⁶ jaitūnaitāla (jvara 68),³⁴⁷ jānakīphala (apasmāra 14),³⁴⁸ jūphā (jvara 125),³⁴⁹ jūphikā (kāsa 20), kaharavā (arśas 39),³⁵⁰ kalā (jvara 5 and 125),³⁵¹ kalaśora (pañḍuroga 11), kalasora (raktapitta 7),³⁵² kāsinī (jvara 125),³⁵³ katīra (atisāra 46),³⁵⁴ khatamī (jvara 126; kāsa 17),³⁵⁵ khubbājī (kāsa 17),³⁵⁶ khūnakharābā (arśas 39),³⁵⁷ kubera

(krimi 5),³⁵⁸ kulaphā (rājayaḥśman 29),³⁵⁹ kunaina (jvara 36),³⁶⁰ makhatūma (jvara 81), muremakī (jvara 81),³⁶¹ papītā (jvara 81),³⁶² podī (agnimāndya 41),³⁶³ podīna (chardi 1),³⁶⁴ revatasitā (śvāsa 27),³⁶⁵ rūmagundra (jvara 71),³⁶⁶ sahasrasuma (arśas 4),³⁶⁷ śāhatarā (jvara 126),³⁶⁸ sanāmukī (arśas 8),³⁶⁹ saudhāvāri (agnimāndya 40–46),³⁷⁰ soḍāvāri (agnimāndya 2),³⁷¹ svādukhistā (raktapitta 13),³⁷² tamākhū (krimi 6),³⁷³ tārpīnātaila (jvara 68),³⁷⁴ tīkṣṇapattrā (trṣṇā 13)³⁷⁵, unnābha (jvara 124; rājayaḥśman 23),³⁷⁶ vādāvarda (rājayaḥśman 30),³⁷⁷ vanapsā (jvara 16),³⁷⁸ and viṣṇupadāmṛta (rājayaḥśman 2).³⁷⁹

Some medicinal preparations are borrowed from Islamic or western medicine, for example, cāya (tea; jvara 35) and śārkara (atisāra 38; agnimāndya 29). Compound formulae derived from Islamic medicine are itrīphala (mūrchā 14), sikañjī (agnimāndya 3), and sulemānīlavāṇa (agnimāndya 10–11).

The last verses of the first prakoṣṭha mention the author's name, Jayadevaśarman,³⁸⁰ and his residence, Rāmadurganagara, in Marupradeśa,³⁸¹ Rājasthān. The commentator adds numerous details on the author's genealogy: he was the younger of the two sons of Sāṃvalarāmaśarman;³⁸² his grandfather's name was Raghunātharāyaśarman. Jayadevaśarman was adopted by Caturbhujāśarman, a paternal uncle of his father, who instructed him in āyurveda and other sciences.³⁸³ The author himself mentions two of his teachers, Śrīdatta and Nīlakaṇṭha; āyurveda was taught to him by Sāgara, i.e., Sāgarāmallaśarman, and Śrīmaṇi, i.e., Maṇirāmaśarman.³⁸⁴

The *Siddhabhaiṣajyamañjūṣā* was completed in 1929/30.³⁸⁵

The Sanskrit commentary on the *Siddhabhaiṣajyamañjūṣā*, called *Kuñcīkā*, was written by Hanumatprasāda.³⁸⁶ The *Kuñcīkā* gives synonyms of the names of medicinal substances, and in many cases the vernacular names as well; it explains how to prepare the compound drugs, etc. The metres of Jayadeva's verses and the alaṃkāras employed are also pointed out.

Works and authorities quoted or referred to are: *Atharvaveda* (rājayaḥśman 2 and 3), *Bhoja* (rājayaḥśman 1), *Caraka* (rājayaḥśman 2), *Nighaṇṭuratnākara* (grahaṇī 11), *Rasendrasārasaṃgraha* (jvara 114; grahaṇī 13), *Rgveda* (rājayaḥśman 2), *Śārṅgadharma* (jvara 13), *Siddhabhaiṣajyamāñjūṣā* (jvara 16–18 and 19; agnimāndya 39), *Siddhāntanidāna* (jvara 152), *Suśruta* (arśas 1), *Vaidyājīvana* (agnimāndya 27), and *Yogataṅgañī* (jvara 115).

Occasionally, the names of vaidyas are mentioned who transmitted a particular formula: Kṣamāpativājaṇyayin,³⁸⁷ (kāsa 26–27), Rāmaratnaśarman (śvāsa 26 and 27–28), and Śyāmalālā (jvara 97–98).

*SIDDHĀNTANIDĀNA*³⁸⁸ was written by Gaṇanāthasena. This is a modern work in Sanskrit on the general principles of pathology, and on the aetiology and symptomatology of diseases. It is based on āyurvedic concepts, but has been influenced by western medicine in its nosology. The arrangement of the diseases has been inspired by the *Mādhavanidāna*. Only the first volume, on the basic concepts of pathology and on fevers, has been published. This first part of the work consists of 306 verses, arranged in four chapters.

Chapter one, *doṣādūṣyādinirṇaya*, begins with a maṅgala in praise of Viṣṇu and a stanza addressed to the author's father, Viśvanātha, who was his teacher in āyurveda. The remaining verses of chapter one (3–50) are on the doṣas and dūṣyas, their normal and their imbalanced state, the doṣas when accompanied by or devoid of āma, the signs of increase and decrease of the doṣas and dūṣyas, and the stages of the pathogenetic process. Chapter two (*vyādhivijñāna*; 15 verses) deals with the concepts of nidāna, pūrvārūpa, rūpa, upaśaya, and saṃprāpti, while chapter three (*vyādhiparīkṣā*; 11 verses) is concerned with the examination of a patient. Chapter four (230 verses) contains descriptions of a long series of fevers, partly taken from western medicine.

Sources are not referred to, but a number of verses have been taken from the *Mādhavanidāna* (or its sources)³⁸⁹ and the *Suśrutasaṃhitā*.³⁹⁰ The majority of the stanzas, however, have been composed by the author.

The *Siddhāntanidāna* is quoted in Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana* and in the same author's *Doṣakāraṇatvamīmāṃsā*, Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*, and the commentary on the *Siddhabhaiṣajyamajjūṣā*.

The rather elaborate commentary, called *Tattvadarśinī*, written by the author himself, does not mention the sources of the *Siddhāntanidāna*, but quotes from a number of works and authors: Bhāvamiśra (4.98 and 125), Caraka (passim), (*Bhagavadgītā* (1.4), Kharanāda (4.177), Mādhava (4.127), *Nāgabhartṛtantra* (4.198), *Pratyakṣa(śārīra)* (1.13), *Sāṃkhyakārikā* (1.4), Śārṅgadharma (1.12; 4.225–226), Sudāntasena (1.19, 20, 21), Suśruta (passim), Vāgbhaṭa (passim), (Vijaya)rakṣita (4.198), and Vṛddhasuśruta (4.31).

Some types of fever, well known from āyurvedic texts, are equated with syndromes of western medicine: abhinyāśajvara (4.20–22): severe toxæmia or septicaemia; saṃtatajvara (4.186–188): malarial remittent fever; satataka (4.189): double quotidian fever; anyedyuṣka (4.195): quotidian fever; tṛtīyaka (4.195): tertian fever; caturthaka (4.195): quartan fever; pralepaka (4.206–207): hectic fever; bṛhanmasūrīkā (4.129–147): smallpox; laghumasūrīkā (4.148–159): chicken pox; romāntikā (4.160–170): measles; karṇamūlakajvara (4.175–177): mumps; ślaipadikajvara (4.208): filarial fever.

New types of fever, borrowed from western medicine, are: āntrikajvara (4.45–61): enteric or typhoid fever; granthikajvara (4.62–74): plague or bubonic fever; śleṣmakajvara (4.75–85): influenza; saṃdhikajvara (4.86–97): rheumatic fever; śvasanakajvara (4.98–115): pneumonia; ākṣepakajvara (4.116–124): cerebrospinal fever; daṇḍakajvara (4.171–174): dengue; kālajvara (4.190–194): kala-azar or leishmaniasis. The series of fevers ends with aupadravikajvara (4.209) as a complication of protracted diseases, especially grahaṇī, and with fevers occurring in foreign countries (4.210: śoṇa- and hāridrakajvara).³⁹¹

A large number of Sanskrit equivalents for terms borrowed from western medicine are employed, for example, jīvāṇu (micro-organism; 4.47, 65, 76, 88, 101, 107), saṃkrānti (the transmission of contagious diseases; 4.77), śvāsayantra (the respiratory tract; 4.78), kālāpuṭa (pericardium; 4.90), phusphusacchada (pleura; 4.91), suṣumnakāṇḍa (spinal cord; 4.118), etc.

Gaṇanāthasena was born in Benares in 1877. His father, Viśvanāthasena, who gave

him his first lessons in āyurveda, moved to Calcutta in 1883, after the death of his wife. Gaṇanāthasena was trained in āyurveda and modern medicine at the Medical College of Calcutta. He founded the Viśvanāth Āyurveda College at Calcutta in 1931 and established the Kalpataru Āyurvedic Works, a manufacturing firm, also at Calcutta. The honorary title of Mahāmahopadhyāya was conferred on him in 1916 and he was elected president of the All India Āyurveda Mahāsammelan thrice (in 1911, 1920, and 1931). He was the Dean of the Faculty of Medicine and Surgery of Banaras Hindu University from 1927 to 1938. He died in 1945.

Apart from the *Siddhāntanidāna*, he wrote the *Pratyakṣaśārīra* and *Samjñāpañcakavimarśa*.³⁹²

SIDDHAPRAYOGA by Viśveśvaradayālu³⁹³ is a therapeutic treatise in nineteen chapters, which are arranged in an unusual order: (1) jvara, (2) atisāra and grahaṇī, (3) ajīrṇa, (4) plīharoga, vṛścikadaṃśa, and jalodara, (5) rājayakṣman, (6) kāsa, śvāsa, hikkā, karnāsrāva, (7) arśas and bhagna, (8) vātāroga, śūla, kuṣṭha, śītapitta, (9) upadaṃśa, (10) dadru, pāmā, kaṇḍū, (11) mūtrakṛcchra, (12) virecana, (13) vraṇa, (14) dhāturoga, prameha, svapnadoṣa,³⁹⁴ (15) strīroga, (16) śrīroga,³⁹⁵ (17) mukharoga, (18) netraroga, (19) bālaroga; a pariśiṣṭa on a diversity of subjects is found at the end. The work contains both āyurvedic prescriptions and rasayogas.

Borrowings from western medicine occur rather frequently in this book. Examples are: tāpamāna (body temperature), phusphusabhiṭtīśoṭha (pneumonia), and plegākhyaroga (plague).

The materia medica is of a mixed type and contains some drugs deriving from Islamic and western medicine: aisiḍaborika (boric acid: 36), beriyaṃ salphāitaka (barium sulphite; 84), brāṇḍi (brandy; 48), isabgola (71),³⁹⁶ khabbājī (45),³⁹⁷ kīṭaṣṭhivana (19),³⁹⁸ kunenasalphet (quinine sulphate; 15), pistā (78),³⁹⁹ pīparamēṇṭaka (peppermint; 24), śītacīnī (70),⁴⁰⁰ and veslina (vaseline; 51).

SIDDHAPRAYOGALATIKĀ⁴⁰¹ by Gulrājśarmamiśra is a mainly therapeutic treatise, consisting of about 1,800 verses, arranged in a maṅgalācaraṇa, upodghāta, and thirty-four chapters (puṣpa).

The maṅgala is in praise of Pārvatī; the author also pays homage to his teachers in āyurveda and other sciences: Govardhana Chāṅgāṇī (3 and 19),⁴⁰² Kedāra(nātha) (4), and Kālīcaraṇa (5).⁴⁰³ The upodghāta deals with some general subjects, pharmaceutical preparations, groups of drugs, weights and measures, and substitutes for particular drugs.

The order of the diseases dealt with in chapters one to thirty-four deviates considerably from the traditional arrangements and seems to be peculiar to this treatise.

Noteworthy disorders mentioned by the author are: aṃśughāta (28.1–19),⁴⁰⁴ antrapucchabhavaśoṭha (33.11),⁴⁰⁵ ātapadagdha (1.147),⁴⁰⁶ asthiśoṣa (17.62), dhanuṣṭāṅka (12.7),⁴⁰⁷ dr̥ṣṭidoṣa (26.24 and 93),⁴⁰⁸ hr̥dvepana (17.64),⁴⁰⁹ kaṣṣāgranthi (29.25),⁴¹⁰ kālasphoṭa (32.27–29),⁴¹¹ mastiṣkaroga (28.10),⁴¹² māstiṣkaroga (26.79), maśūrīkājvara (1.140–141),⁴¹³ mauktikajvara (1.150),⁴¹⁴ mocāghāta (12.18),⁴¹⁵ phiraṅga (12.44; 17.62; 26.103), pratiśyāyajvara (1.168), raktacāpa (12.7; 21.50; 33.27

and 85),⁴¹⁶ *retahkṣaraṇa* (18.23),⁴¹⁷ *saujāka* (13.2 and 22),⁴¹⁸ *siriṇī* (29.51–53),⁴¹⁹ *sphoṭaphunsi* (16.9),⁴²⁰ *suṭātaka* (13.24),⁴²¹ *śvasanaka* *javara* (1.33),⁴²² *urastoya* (27.5), *vipakṣaka* (12.20),⁴²³ *viṣaṣṭhoṭa* (32.29), *yakṛcchūla* (33.14), *yamayūkāḥ* (29.31),⁴²⁴ *yoṣāpasmāraka* (17.63), and *yoṣāpasmāraka* (33.83).

The author repeatedly stresses that the efficacy of his formulae has been tested by himself⁴²⁵ or other medical experts.⁴²⁶

The maṅgala verses mention some physicians who transmitted formulae to the author:⁴²⁷ Govardhana (Chāṅgāṇī), Yādava (Trikaṁjī), Lakṣmī(rāma),⁴²⁸ Kṛṣṇa(rāma),⁴²⁹ Jaya(deva),⁴³⁰ and Śiva(śarman).⁴³¹

Authorities from whom particular recipes derive and other sources referred to, by name are: Agastya (23.23), *Basavarājīya* (5.12),⁴³² Boraḍakara (1.98), Dhanvantari (1.18; 26.63), Gahanaṇātha (22.55; 34.23), the author's guru (1.13, 38, 62, 106; 7.8; 12.27; 16.34; 22.14), Hakīma Ahamada Baksa (3.50), Hari (28.13), Jayadeva (4.48ab),⁴³³ Kaśyapa (33.61 and 80), Kāśyapa (33.59), Kṛṣṇarāma (4.68),⁴³⁴ Lakṣmīrāma (21.51), Prabhaviṣṇu (16.7), Rāmākṛṣṇa (3.40), Rāmanārāyaṇa (2.7), the student (vidyārthin) Śāmbhudatta, a Sārasvata brāhmaṇa (17.28), Saṁtoṣaśarman (30.17; the formulae of chapter thirty-three), Sītārāma (2.67), Śiva(śarman) (1.92; 8.18), Suśruta (26.19; 32.12), Tryambakāśāstrin (2.39),⁴³⁵ Vedaprakāśa (20.21), Viśvanātha Dvivedin (33.75), Yādava(śarman) (Trikaṁjī) (1.48 and 88; 4.64; 6.21; 22.32), *Yāvanamata* (7.16),⁴³⁶ and *Yogarātnākara* (34.42).

More recipes than indicated were borrowed from earlier works⁴³⁷ or consist of adaptations and are rewritten by the author.⁴³⁸

Some elements of western medicine were incorporated: the circulation of the blood is referred to⁴³⁹ and the presence of iron in the erythrocytes is known to the author.⁴⁴⁰

The materia medica is characterized by numerous substances unknown to early texts; a not inconsiderable number of these drugs derive from Yūnānī and western medicine.

Examples of noteworthy substances are: ābareśama (21.14; 34.41),⁴⁴¹ *abdhiskanda* (8.16),⁴⁴² *akīka* (7.20; 8.14; 21.4),⁴⁴³ *añjavāra* (22.30),⁴⁴⁴ *ārogyavardhinī* (22.30),⁴⁴⁵ *bahumana* (21.41),⁴⁴⁶ *bhillī* (2.2; 12.10),⁴⁴⁷ *borika* (15.8),⁴⁴⁸ *brāṇḍī* (13.13),⁴⁴⁹ *chādīlāchāī* (upodgṛhāta 58),⁴⁵⁰ *cokiyāṭaikaṇa* (5.7),⁴⁵¹ *dālacikanā* (17.12), *dālacikkana* (13.12),⁴⁵² *dālacikkanaka* (13.6), *dālacīnī* (6.18),⁴⁵³ *dambū* (33.32), *dambula* (14.20), *dambūla* (3.17 and 45; 7.9),⁴⁵⁴ *dāriyāyika* (21.46),⁴⁵⁵ *ḍhākagundra* (18.9),⁴⁵⁶ *eluvā* ((22.37),⁴⁵⁷ *gājavā* (8.19),⁴⁵⁸ *gandhavirojā* (15.43),⁴⁵⁹ *guḍaghoṣā* (3.54),⁴⁶⁰ *guḍamāra* (18.6),⁴⁶¹ *gulagulā* (24.12),⁴⁶² *habbulasa* (2.18),⁴⁶³ *haramala* (22.42),⁴⁶⁴ *haraśṛṅgāra* (1.80),⁴⁶⁵ *himasāgara* (12.21),⁴⁶⁶ *hīrādokhī* (14.20),⁴⁶⁷ *jadavāra* (8.16),⁴⁶⁸ *jahara* (7.20),⁴⁶⁹ *jaharamoharā* (2.41; 8.14; 21.9),⁴⁷⁰ *jalanīma* (19.32),⁴⁷¹ *jaṭūnataila* (1.138 and 139),⁴⁷² *jhāvū* (26.23),⁴⁷³ *junda* (8.25; 21.42),⁴⁷⁴ *jundaka* (17.46), *jundavedastara* (17.2),⁴⁷⁵ *kābulī abhayā* (2.24),⁴⁷⁶ *kaharavā* (3.27),⁴⁷⁷ *kalamīśoraka* (1.129),⁴⁷⁸ *kālāri* (1.37 and 48),⁴⁷⁹ *kalīsudhā* (19.49; 24.14),⁴⁸⁰ *kandhārīdāḍimi* (7.34),⁴⁸¹ *kāravālika acid* (15.14),⁴⁸² *kārbolika* (15.44),⁴⁸³ *karīla* (20.16),⁴⁸⁴ *katīrāgundra* (33.32),⁴⁸⁵ *kattha* (13.15),⁴⁸⁶ *khairasāra* (3.2),⁴⁸⁷ *khūbakalā* (1.21 and 51),⁴⁸⁸ *khūnakharāvā* (3.27),⁴⁸⁹ *kiṅkara* (15.32),⁴⁹⁰ *kiṅkaraka* (19.44), *kṛṣṇagundrā* (18.18),⁴⁹¹ *kulthī* (30.17),⁴⁹² *lāhī* (2.43),⁴⁹³ *latākaraṇja* (1.12),⁴⁹⁴ *mahārāsna* (12.19),⁴⁹⁵ *māī*, *hrasvā*

(2.18),⁴⁹⁶ mārūvmtāka (17.35),⁴⁹⁷ mocanī (26.69),⁴⁹⁸ morā (1.89),⁴⁹⁹ narakarcūraṇa (19.26),⁵⁰⁰ nāyakā (18.6),⁵⁰¹ nīlagirītaila (15.13),⁵⁰² nīlama (21.9),⁵⁰³ nirañjana (33.32 and 35),⁵⁰⁴ pannā (21.9, 13, 34),⁵⁰⁵ pāthānīlodhra (14.1; 33.17),⁵⁰⁶ pittarpapaṭa (1.49),⁵⁰⁷ postaḍoḍā (17.50),⁵⁰⁸ prastarapuṣpaka (21.42),⁵⁰⁹ rājī, kāsīkā (11.4),⁵¹⁰ rājī, kāsībhūmisamudbhūtā (24.5), sabja (28.14),⁵¹¹ sahasrasuma (3.52),⁵¹² sālmapa-ñjikā (17.8),⁵¹³ saṅgeyaśa(ba) (7.20; 8.14; 21.10),⁵¹⁴ saptaraṅgi (18.19; 30.41),⁵¹⁵ saṭhava (33.10),⁵¹⁶ śora (15.8),⁵¹⁷ śoraka (4.41; 30.10 and 18), sphaiṭhullā (1.43),⁵¹⁸ sprīṭka (13.13),⁵¹⁹ suma (17.46),⁵²⁰ surañjana (12.8, 49, 55),⁵²¹ śyāhajīraṇa (4.2 and 15),⁵²² tamākhū (15.13),⁵²³ tārpīnataila (1.138 and 139),⁵²⁴ taruṇyarka (15.8 and 33; 21.11 and 16; 26.38),⁵²⁵ tṛṇakānta (3.17; 7.20; 14.2 and 20; 21.5, 14, 35, 40),⁵²⁶ tukhmakhatami (8.19),⁵²⁷ tukhmarāī (7.28),⁵²⁸ unnāva (12.3; 19.32),⁵²⁹ usabā (12.3), usavā (19.45), usavvā (19.32),⁵³⁰ utphulla (29.26),⁵³¹ utphullā (15.12), vacā, hauṇī (3.30),⁵³² vahamana (21.36),⁵³³ vāvacī (19.38),⁵³⁴ vidhukānta (3.17),⁵³⁵ vihi (8.19),⁵³⁶ viṣamohara (28.8),⁵³⁷ viṣamoharā (11.11), viṣamorā (1.19; 21.46), and viṣamoraka (21.14).

The *Siddhaprayogalatikā* is quoted in the *Viśikhānupraveśavijñāna*.⁵³⁸

The author, a brāhmaṇa, the eldest son of Kedāra(malla) and Mahādevī, was born at Gaurera, a village in the Jaypur district of Rājasthān. He studied āyurveda with Govardhan Śarmā Chāṅgāṇī; his Sanskrit teacher was Paṇḍit Kālīcaraṇ, his spiritual guru Jāgeśvar Jagannāth. He has been working as a practising physician for over fifty-five years. He established the Ayurvedic College and hospital at Pakvasa, Nagpur.

Apart from the *Siddhaprayogalatikā* he wrote the *Viśikhānupraveśavijñāna* and a Sanskrit and Hindī commentary on the *Āyurvedaprakāśa*.⁵³⁹

The *Siddhaprayogalatikā* was completed in 1987/88.⁵⁴⁰

SIDDHAYOGASAMGRAHA⁵⁴¹ by Vaidya Yādavajī Trikamajī Ācārya⁵⁴² is a collection of compound formulae in Sanskrit, accompanied by explanations in Hindī on their way of preparation, dosage, anupāna, and indications. Some parts of the work are entirely in Hindī. The treatise consists of twenty-nine chapters (adhikāra) and an appendix (pari-ṣṭa). The chapters are arranged according to the diseases against which the recipes are to be used, but this order differs from that of the *Mādhavanidāna* in many respects. The recipes⁵⁴³ are partly taken from a number of āyurvedic and iatro-chemical treatises. Another, not inconsiderable part, derives from the author himself. Occasionally a recipe is said to have been transmitted by a physician mentioned by name.⁵⁴⁴

Sources referred to are: *Aṣṭāṅgasamgraha*, *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Cakradatta*, *Caraka*, *Rasaratnasamuccaya*, *Rasendrasārasaṅgraha*, *Śārṅgadharasaṅ-ghitā*, *Siddhabhaiṣajyamāṇimālā*, *Suśruta*, *Triśatī*, *Vaidyajīvana*, *Yogacintāmaṇi*, and *Yogarātnākara*.⁵⁴⁵ A number of recipes quoted from these sources have been changed by the author.⁵⁴⁶

Yādava(śarman) is referred to in Gulrājśarmamiśra's *Siddhaprayogalatikā*, a work that contains formulae attributed to him.⁵⁴⁷

ŚOḢAŚĀṆGAHRDAYA⁵⁴⁸ is a complete textbook of āyurveda, composed by Priyavrata Śarmā.

This treatise consists of 1,551 verses in āryā metre,⁵⁴⁹ arranged, in accordance with its title, in sixteen chapters.

Chapter one is about basic principles (maulikasiddhāntāḥ) and chapter two about anatomy (śārīra). Chapter three, on pharmacology (dravyaguṇa), deals with the basic concepts of pharmacology (1–8) and with the properties of the main medicinal substances (90–140). The subject of chapter four is the preparation of medicines (bheṣajakalpanā); this chapter describes the various medicinal preparations (1–42), weights and measures (43–47), technical rules (paribhāṣā; 48–71), and a number of compound medicines in the following order: kvātha, phāṇṭa, hima, cūrṇa, vaṭikā, avaleha, pāka, modaka, ghrta and taila, āsava and ariṣṭa. Chapter five gives a summary description of rasaśāstra. Chapter six is on the rules for a healthy life (svasthavṛtta). Chapters seven and eight are concerned with rasāyana and vājīkaraṇa. The general principles of pathology (1–30) and the diagnosis of a number of diseases (31–198) form the subjects of chapter nine (rogavijñāna). The remaining chapters are devoted to kāyacikitsā (10), mānasaroga (mental disorders) (11), prasūtitantra (obstetrics and gynaecology) (12), kaumārabhr̥tya (paediatrics) (13), agadatantra (14), śalyatantra (15), and śālākya (16).

The chapter on anatomy (2) has incorporated many concepts derived from western medicine: arteries (dhamanī), veins (sirā), and capillaries (keśikā) are distinguished; the functions of heart and lungs and the circulation of the blood are described; the ureters are called gavīnī; the dissection of corpses (śavaccheda) is recommended for anatomical studies. Chapter three describes some drugs added to the classical āyurvedic materia medica in later times: babbūla (3.57), pārasīkayavānī (3.99), jayapāla (3.108). Chapter four describes the preparation of an arka (4.36); in the verses on weights and measures it mentions a gram (grāma) and a kilogram (kilo); among the prescriptions we find an ākārakarabhādicūrṇa (4.112–113) and a kṛṣṇabījādicūrṇa (4.138–139); senna (svarṇadalā) is an ingredient of one of the compound medicines (4.142); madaphala (= mājūphala) is mentioned (4.146), as well as kulañjana (4.261). The purification of opium (ahipheṇa) and Cannabis (bhaṅgā) are met with in chapter five. The description of the diseases in chapter nine is not in conformity with the order established by Mādhava; masūrikā is absent, as well as diseases added after the times of Mādhava. Mānasaroga replaces bhūtaavidyā.

The *Ṣoḍaśāṅgaḥṛdaya* is quoted in the auto-commentaries on the author's *Āyurvedadarśana* and *Dravyaguṇasūtra*.

The author was born in Mustafāpur near Paṭnā and is a son of Rāmāvatāra and Premadūlārī.⁵⁵⁰ Medical works in Sanskrit by the same author are the *Āyurvedadarśana*, *Doṣākāraṇatvamī māṃsā*, *Dravyaguṇasūtra*, and *Priyanighaṇṭu*.

The *Ṣoḍaśāṅgaḥṛdaya* was completed in 1986/87.⁵⁵¹

STRĪCIKITSĀ, compiled by Vasatirāma.⁵⁵²

SŪJAKACIKITSĀSAMGRAHA, compiled by Gaṇeśadatta.⁵⁵³

SVAPNAKAMALĀKARA by Rām KumārRāy.⁵⁵⁴ This work is a compilation on dreams and their meaning. It consists of five chapters (kallola); chapters one to four (44, 140, 116, and 36 verses respectively) are from unspecified sources; chapter five has been

drawn from the *Dharmasindhu*.⁵⁵⁵

SVASTHAVṚTTASAMUCCAYA by Rājeśvaradatta Mīśra Śāstrin.⁵⁵⁶ This work deals, as indicated by its title, with the rules for the preservation of health. The text, in verse and prose, was partly written by the author, partly compiled from various sources. The passages deriving from the author betray the influence of western medicine; micro-organisms (jīvāṇu, kīṭāṇu) are repeatedly mentioned; diseases like kala-azar (kāla-jvara; 342), plague (vātālikā; 342–344), typhoid (āntrikajvara; 344–345), and influenza (śleṣmikasaṃnipāta; 345) are elaborately described.

Sources referred to by name are: *Aṣṭāṅgasaṃgraha*, *Ātreyaśaṃhitā*, *Bhagavadgītā*, *Bhāvaprakāśa*, *Caraka*, *Dakṣasmṛti*,⁵⁵⁷ *Devala*, *Jābālasṃṛti*,⁵⁵⁸ *Kṣemakutūhala*, *Mādhavanidāna*, *Manusmṛti*, *Mayamata*, *Nighaṇṭu*, *Rājamārtāṇḍa*, *Śārṅgadhara*, *Siddhāntanidāna*, *Smṛticandrikā*,⁵⁵⁹ *Suśruta*, *Vāgbhaṭa*, *Vātsyāyana*, *Vṛddhāvāgbhaṭa*, *Vṛndamādhava*, *Yājñavalkya*, and *Yogarātnākara*.

The author, the eldest son of Rāmanātha Mīśra, was born in a village called Āṭā in the Goṇḍā district in 1901. He studied in Benares, where he settled and practised medicine. He died in 1969.⁵⁶⁰

SVĀSTHYĀMṚTATARANĠINĪ by Lakṣmīnārāyaṇa Mīśra.⁵⁶¹ This work consists of quotations from Sanskrit works, accompanied by a Hindi translation.

TRIDOṢASAMGRAHA by Dharmadattavaidya.⁵⁶²

Chapter one (pañcamahābhūtaviśayakavākyaśaṃgraha) deals with the five mahābhūtas, chapter two (vāyuvīśayakavākyaśaṃgraha) with vāyu, chapter three (pittaviśayakavākyaśaṃgraha) with pitta, chapter four (kaphaviśayakavākyaśaṃgraha) with kapha.

The treatise consists of quotations, as well as a few parts which are obviously written by the author.

Works and authorities quoted are: *Aṣṭāṅgasaṃgraha*, *Bhagavadgītā* (65), *Carakaśaṃhitā*, *Chāndogyaopaniṣad* (5), *Gītā* (7), *Kāśyapaśaṃhitā*, *Śārṅgadhara* (27), *Suśrutasaṃhitā*, *Vāgbhaṭa*, and *Yogarātnākara* (59).

TRIDOṢATATVA by Duraisvāmin Aiyāṅgār.⁵⁶³

TRIDOṢAVIJÑĀNA by Upendranāthadāsa.⁵⁶⁴

This work consists of ten chapters (adhyaṃya), mainly in prose, interspersed with verses; the last verses of each chapter summarize the conclusion of the author.

Caraka and Suśruta are repeatedly quoted.

Chapter one (tridoṣavicāraprayojana; 3–8) puts forward a number of questions: the scientific status of āyurveda, conflicting opinions on a number of subjects, the nature of a doṣa (doṣasvarūpa), etc.; a series of interpretations regarding the nature of a doṣa are listed: a doṣa has the nature of a dravya, it is a śakti, it is sthūla, it is sūkṣma, it is both sthūla and sūkṣma; the author will deal with these questions in the subsequent chapters. Chapter two (doṣadhātumalatvanirūpaṇa; 9–24) deals with generali-

ties on the doṣas, the position of blood and the other dhātus, etc. Chapter three (doṣasaṃjñāhetuvarṇana; 25–28) is about the terms doṣa, dhātu and mala. Chapter four (tritvasamarthana; 29–38) is concerned with the position of blood; the thesis that it should be regarded as a doṣa is rejected. Chapter five (dravyatvanirūpaṇa; 39–43) establishes that a doṣa is a dravya. Chapter six (sthūlatvasthāpāna; 44–56) discusses various opinions on the question whether the doṣas are gross (sthūla), subtle (sūkṣma), etc.; the author concludes that they take up a middle position (madhyapramāṇa). Chapter seven (vātādyutpādanotpattiyādivarṇana; 57–74) deals with the relationships between the doṣas, together with their guṇas, and the mahābhūtas, together with their guṇas. Chapter eight (vātādiḡuṇakarmavarṇana; 75–130) is concerned with the qualities and actions of vāta, pitta and kapha; it lists and defines these. Chapter nine (vātādisvarūpabhedavarṇana; 131–156) describes the five kinds of vāta, pitta and kapha. Chapter ten (prādhānyakhyāpāna; 157–199) discusses the concept of disease (roga) and opinions on the type of causation (kāraṇatva) attributed to the doṣas; the author concludes that the doṣas are both samavāyikāraṇa and nimitta; finally, he deals with āgantū diseases and opinions on their relationship to the doṣas; he is convinced that the doṣas are their main (pradhāna) cause.

TRIDOṢAVIMARŚA by Dharmadatta.⁵⁶⁵

The first part of this treatise consists of a prastāvanā in prose (1–43),⁵⁶⁶ with the subtitle mūlatattvanirūpaṇa, which deals with basic concepts, such as: elements of Sāṃkhya philosophy, the five mahābhūtas, jīvāṇus (regarded as pathogenic micro-organisms), ojas, nija and āgantū diseases, sātmya and asātmya.

The second part, the *Tridoṣavimarśa* properly, also in prose, is about generalities regarding the doṣas (3–4), vāta (5–7), pitta (7–12), kapha (13–18), the signs pointing to excitement of vāta (19–21), pitta (21–24) and kapha (24–27), and, finally, the constitutions (prakṛti) dominated by vāta (27–29), pitta (29–30) and kapha (30–31).

The third part, called *Tridoṣasaṃgraha*, in prose and verse, and largely consisting of quotations, discusses: the twenty-five tattvas and the guṇas (33–35), vāta (36–78), pitta (79–100), kapha (101–131), together with the treatment of disorders caused by each of them, various particularities regarding the doṣas, disorders brought about when they stay in particular constituents of the body, the characteristics of their āma and nīrāma states, etc. (132–152).

Part three is made up of quotations which largely derive from the *Carakasamhitā*, *Suśrutasaṃhitā* and Vāgbhata's works; other sources mentioned by name are the *Bhāvaprakāśa* (130, 131), *Mādhavanidāna* (52, 54, 87, 107, 111), *Śārngadharasaṃhitā* (39, 40, 42, 82, 115), and *Yogaratanākara* (39).

UPADAMŚACIKITSĀSAMGRAHA, compiled by Gaṇeśadatta Śāstrin.⁵⁶⁷

UPADAMŚASUDHĀSINDHU, compiled by Gadādhara Tripaṭhin.⁵⁶⁸

VAIDYAHṚDAYA by Rādhācandra Śarmaṇ.⁵⁶⁹

VAIDYAKĪYASUBHĀSITASĀHITYA or *Sāhityakasubhāṣitavaidyaka*, compiled by Bhāskara Govinda Ghāṇekar, a collection of maxims relating to the science of medicine.⁵⁷⁰

VAIDYAKĪYASUBHĀṢITĀVALĪ, compiled by Prāṇajīvan M. Mehtā.⁵⁷¹

VAIDYAŚIROMAṆI by Veṅkaṭarāvu.⁵⁷²

VAMANAKALPATARU by Gosvāmī Rāmarāṅgaśāstrī.⁵⁷³ This short treatise, in forty-seven verses, deals with emesis. It is based on Vāgbhata's *Aṣṭāṅgaḥṛdayasaṃhitā*.

VANAUṢADHIDARPANA or the Ayurvedic Materia Medica, with quotations and copious original prescriptions from selected works, by Kavirāja Virajācaraṇa Gupta Kavibhūṣaṇa.⁵⁷⁴ This is a useful work, describing the names, properties and actions of medicinal plants, arranged according to the Sanskrit alphabet.⁵⁷⁵

VIṢAMAÑJARĪ by Raṅganātha Sakhārāma Lāḷe.⁵⁷⁶

VIṢATANTRACIKITSĀPRAKĀŚA, compiled by Ravidatta Śāstrin.⁵⁷⁷ This work, in verse and prose, consists of seven chapters which are identical with chapters 1–5, 7, and 6 of the Kalpasthāna of the *Suśrutasaṃhitā*.

VIṢAVAIDYACINTĀMAṆI by Boddikūrapāṭi Venkaṭaraṅga.⁵⁷⁸

VIŚIKHĀNUPRAVEŚAVIJNĀNA⁵⁷⁹ or *Cikitsākarmapraveśa*, written by Gulrāj Śarmā Miśra,⁵⁸⁰ in collaboration with Govind Prasād Upādhyāya.⁵⁸¹

This treatise, partly composed by the author, partly compiled from earlier sources, consists of sixteen chapters (sopāna), dealing with introductory matter (1; maṅgalācaraṇa), general principles (2; viśikhānupraveśa), the examination of the patient (3; rogīparīkṣā), the constitutions (4; prakṛti), the eightfold examination of a patient (5; aṣṭavidhapaṛīkṣā), general diagnostic principles (6; rogapaṛīkṣā), some treatments belonging to pañcākarmaṇ (7; subjects described are sneha, abhyaṅga, and svedana), emetic and purgative procedures (8; vamanavirecana), clysters (9; basti), errhines (10; nasya), treatment of diseases (11; cikitsā), dosages of medicines (12; mātṛā), the proper times for the administration of medicines (13; auśadhasevanakāla), substances, mainly fluids, to be prescribed together with a drug or after its ingestion (14; saḥapāna, anupāna), urgent treatments (15; ātyayikavijnāna),⁵⁸² and quickly acting medicines (16; āśucikitsā).

The work ends with verses on the purpose of the book and on the author.

The chapter on treatment describes the aetiology, symptomatology⁵⁸³ and therapy of the diseases belonging to the divisions of kāyacikitsā and bhūtaavidyā.⁵⁸⁴ The diseases are arranged in the order of the *Mādhavanidāna*.⁵⁸⁵

Sources mentioned are: *Aṣṭāṅgaḥṛdayasaṃhitā* (often), *Aṣṭāṅgasamgraha* (often), *Āyurvedaprakāśa* (18; 221), *Bhaiṣajyaratnāvalī* (142; 143; 144; 145; 147; 149, etc.),⁵⁸⁶ Bhāvamiśra (216), *Bhāvaprakāśa* (149; 150), *Cakradatta* (57; 106), *ṭīkā* on the *Cakradatta* (85), Cakrapāṇi's commentary on the *Carakasaṃhitā* (131), Caraka (often), Dhanvantari (4; 5), Gadādhara (70), Hemādri (125), Jejjāṭa (70), Lohasvarvasa (227), *Mādhavanidāna* (71; 73; 80; 150; 151, etc.), *Madhukoṣa* (163), *Pañcatantra*

(49), *Rasacintāmaṇi* (216), *Rasataraṅginī* (231), *Rasopaniṣad*, *Śāringadhara* (123), *Siddhabheṣajamaṇimālā* (223; 227; 234), *Suśruta* (often), *Viṅgasena* (146), *Yajurveda* (1), *Yogarātnākara*, (164; 199; 215; 228; 232),⁵⁸⁷ and *Yogarātnāvalī* (163).

Sources added in the commentary are: *Bhela* (94), *Cikitsākalikā* (93), *Gītā* (16; 77), *Govindabhaḡavatpāda* (20; 21),⁵⁸⁸ *Kaṇāda* (43),⁵⁸⁹ *Kharanāda* (79), *Nāḡvijnāna* (51), *Rasādhya* (19), *Rasāmṛta* (218), *Rasaratnasamuccaya* (219), *Rudratāntra* (62), *Siddhaprayogalakikā* (218),⁵⁹⁰ *Taittirīyopaniṣad* (15), and *Viśvāmitra* (119).

Colleagues who gave recipes to the author are:⁵⁹¹ *Bṛhaspati Trigun* (243), a friend (242),⁵⁹² the author's guru⁵⁹³ (253; 259; 263), *Samtoṣaśarman* (241), *Śivaśarman* (260: *ratnarāja*), *Tryambaka Śāstrin* (266: *svaṛṇaparpatī*), *Vedaparakāśa* (272),⁵⁹⁴ *Yādava* (247), *Yādavaśarman* (244), and a *yogin* (255).

The term on which the title of the work is based, *viśikhā*, is defined in the opening lines of chapter two;⁵⁹⁵ this term, found in the *Suśrutasaṃhitā*,⁵⁹⁶ designates the qualifications of a physician before he formally enters his profession. Three types of treatment are distinguished, in increasing order of merit: *āsurīcikitsā* (surgery), *mānuṣī cikitsā* (treatment with drugs), and *daivī cikitsā* (treatment with *rasayogas*) (8–21).

Some ailments known from the later *āyurvedic* literature are mentioned in chapter sixteen: *phirāṅga* (229; 231), *raktacāpa* (248; 249), *suḡāka* (260). A disease borrowed from western medicine is *antrapucchabhavaśoṭha* (242: *appendicitis*).

The *materia medica*, in particular that of chapter sixteen, contains numerous substances introduced in later times: *akīka* (260; 268), *aṇjavāra* (268), *candrasūra* (274), *dambū* (251), *dambula* (260), *eraṇḡakarkaṭī* (241), *gandhaviroḡā* (265), *guḡamāraka* (257),⁵⁹⁷ *hīrāḡokhī* (260), *jahara* (268), *jaharamoharā* (259), *jayapāla* (255), *karpūrakācarī* (247),⁵⁹⁸ *kāṣībhūmisamudbhavā rājikā* (262), *katīrāḡundra* (251), *lohabāṇa* (249), *mārūvr̥ntāka* (262), *niraṇjanaphala* (251), *paṭhānīlodhra* (270), *postaka* (252), *raktabola* (228), *rūmā* (251), *saṃgeyaśa* (268),⁵⁹⁹ *taruṇyarka* (247; 273), and *ṭṇakānta* (268; 269).⁶⁰⁰

Opium and *Cannabis* are repeatedly prescribed.

Part 9

Miscellanea

Chapter 1

Works on pākaśāstra

Medical treatises with a title containing the word pāka are either works on cookery in the service of medicine or collections of formulae for the type of pharmaceutical preparation called pāka.

Information on the contents of a treatise is necessary in order to be able to determine to which group it belongs.

AUṢADHAPĀKĀVALĪ.¹

BHOJANAKUTŪHALA by Raghunātha Paṇḍita.²

BRĤATPĀKASAMGRAHA by Kṛṣṇaprasādatrivedin.³ This is probably a modern work.

BRĤATPĀKĀVALĪ, compiled by Gaṅgāprasādaśarman,⁴ son of Guru Dīnalāla Śarman of Dvivedipura, from sources not mentioned by name,⁵ is a collection of seventy-one pākas and related types of preparation.

The statement found in the introductory verses that the essence of therapy consists of pākavidyā and rasāyana relates to the numerous pāka formulae used for rasāyana purposes.

A pāka is defined as a variety of avaleha (linctus), the difference being that an avaleha is a soft, a pāka a solid type of preparation. The general procedures for preparing a pāka and an avaleha are described in the introductory verses. Although pākas, together with avalehas, constitute the majority of the formulae, the treatise also contains recipes for a guḍa, some khaṇḍas, a lauha, and some modakas.

Substances frequently used as ingredients are ākalla(ka),⁶ opium,⁷ and the seeds and seed capsules of *Papaver somniferum* Linn.⁸ Some other noteworthy substances are cīṇikabāba,⁹ copacīnī,¹⁰ khurāsāna,¹¹ mastakī,¹² and uṭaṅgaṇa.¹³

A number of recipes which, on account of the presence of ingredients of later origin, cannot be very old, are nevertheless attributed to ancient authorities like Ātreya (15–16: jātipattryavaleha) and Bhāradvāja (108–109: copacīnīpāka). One formula (an avaleha called muphara: 106–107) has been borrowed from Islamic medicine; the same may apply to the śālimapāka (36).

The *Br̥hatpākāvalī* dates from the beginning of the twentieth century.¹⁴

KṢEMAKUTŪHALA by Kṣemaśarman.¹⁵

PĀKACANDRIKĀ by Aṇṇajī Ballāla Bāpaṭa Indurakara Vaidya.¹⁶

PĀKADARPANA or *Nalapāka*,¹⁷ ascribed to king Nala,¹⁸ is a work on the culinary art, intended for the royal kitchen.

The treatise consists of 760 verses,¹⁹ arranged in eleven chapters (prakaraṇa),²⁰ and has been composed in the form of a dialogue between king Ṛtuparṇa and king Nala.²¹ The latter, who has adopted the name of Bāhuka after his encounter with the serpent king Karkoṭaka, offers his services as an expert in cookery to king Ṛtuparṇa, who then asks him questions on the origin of his knowledge. Nala begins telling the story of his journey to Damayantī's svayaṃvara and his meeting a group of four gods, the four guardians of the quarters of the sky, also going there. These gods promise to grant him four boons if he is willing to act as their messenger. After Nala's acceptance and deliverance of the message to Damayantī, Indra bestowed on Nala the faculty of making himself invisible, Agni that of controlling fire, Yama the expertise in cookery, and Varuṇa the faculty of controlling the watery element.²² Having listened to Nala's narrative, Ṛtuparṇa requests him to expound his knowledge of the culinary art (1.1–22). Nala complies and proceeds with giving detailed answers to Ṛtuparṇa's questions.

Chapter one, by far the longest (499 verses), deals first with some general topics: the six kinds of food,²³ the importance of food in preventing diseases, the characteristics of a good cook, the eight faults (doṣa)²⁴ to be avoided in well-prepared rice dishes (1.23–56), and the right way of preparing various rice dishes, utkrāṇodaka (meat broth), tahaṛī,²⁵ and rice boiled in broth (māṇisaudana); this section ends with the prevention of the production of garala²⁶ (1.57–119). The chapter proceeds with the description of various varieties of sūpa²⁷ (1.121–141), temana²⁸ and khala,²⁹ dishes made of kulitha beans, and recipes for flavoured types of navaṇīta (fresh butter) and ghee (1.142–199). The remaining part of the chapter is devoted to dishes prepared with vegetables or fruits (1.200–497).

Chapter two is concerned with the regimen during the seasons (ṛtudharma) and the six parts of day and night corresponding to them. Chapters three to eleven are successively about bhakṣya (sweets), pāyasa (milk pudding) and pānaka (refreshing drinks), pānaka again, yūṣa (soups), gṛhṭāṇṇa (dishes with rice and ghee as their main ingredients), lehya (soft dainties), śaityajala (cool and scented water), kṣīrapāka (boiled milk with water, sugar, fragrant flowers or fruits added to it), and dadhi (thick sour milk with flavouring and fragrant substances added).

The recipes of the *Pākadarpaṇa* are modelled on a common pattern and written in a clear style. Each recipe is followed by an enumeration of the medicinal properties and actions of the dish.

Nala is quoted by Cakrapāṇidatta,³⁰ Ḍaḥṇa,³¹ Meghadeva in his commentary on the *Mādhavadraṇyaṇa*, Niścalakara,³² Śīlāṅka,³³ Śivadāsaśena,³⁴ Todara,³⁵ Trimalla,³⁶ and Vopadeva.³⁷ Nala is referred to in the *Kāśyapīyākṣisūkti*,³⁸ Kṣemaśarman's *Kṣemakutūhala*,³⁹ and the anonymous *Pākaśāstra*. Nala was one of the sources of Basava's *Śivatattvaratnākara*.

Some noteworthy terms employed by the author of the *Pākadarpaṇa* are: aṭṭālaka (a refrigerating device; 1.94, 1.97, 2.09, 2.17; 4.29), haraṭṭaka (a grinding stone; 1.129), kalkinī (a knife; 1.219 and 2.87), pravaṇī (a wide-mouthed pot; 1.222, 1.32, 1.38, 1.47, 2.02), pūgapāṭṭa (1.173, 2.16, 2.26, 2.31, 2.45),⁴⁰ tahaṛī (1.81–85), temana (1.142–150

and 155–157),⁴¹ and utkrāṇodaka (1.65–70).

Interesting names of vegetables and fruits are: ākalī (1.485), alasandī (1.262),⁴² ālopā (1.484),⁴³ bāṣpa (1.341),⁴⁴ cakravarta (1.323),⁴⁵ culī (1.336), cūrnikā (1.484), huṃkāra (1.295), kṣudradantī (1.263 and 494), kurpāṭaka (1.265), latāculī (1.338), madapīṭikā (1.484), mahābāṣpa (1.356), mahāculī (1.339), nameru (6.10), rājarambhā (1.211), raktabāṣpa (1.357), saikasa (1.494), sāmudraphala (6.20),⁴⁶ sārāṅga (6.22), satphalā (6.7; 10.18), śilāchillī (1.340), uṇḍūka (1.377), virūpaka (1.296),⁴⁷ and viṣaghnī (1.484).⁴⁸

No particulars are known about the actual author.

The date of composition of the *Pākadarpaṇa* remains undetermined. The quotations from Nala are of no avail because they cannot be traced in the printed text.⁴⁹ The earliest author to refer to some work on cookery by Nala is Cakrapāṇidatta. Some names of plants may point to a period not earlier than about A.D. 1200.⁵⁰ Since chilli is absent from the *Pākadarpaṇa*, it dates probably from before the introduction of this type of pepper into India in the seventeenth century.⁵¹

PĀKĀDHIKĀRA.⁵²

PĀKĀDHIKARAṆA.⁵³

PĀKĀDHYĀYA, anonymous.⁵⁴

PĀKĀDHYĀYA by Harṣakīrti Upādhyāya.⁵⁵

PĀKĀDISAMGRAHA.⁵⁶

PĀKAKRIYĀ.⁵⁷

PĀKAMĀRTAṆḌA.⁵⁸ Sources quoted are: *Pākasudhākara*, *Pākāvalī*,⁵⁹ *Sārasaṃgraha*, *Śārṅgadharma*, *Vaidyavilāsa*, Vaṅgasena, Vṛnda, *Yogacintāmaṇi*, *Yogarātna*, and *Yogarātāvalī*.⁶⁰

One of the introductory verses claims that the essence of the medical art consists of pākavidyā and rasāyana.⁶¹

PĀKANIGHAṆṬU.⁶²

PĀKAPARIBHĀṢĀ.⁶³

PĀKAPRADĪPA by Gaṇeśaśarma.⁶⁴ This work, in 535 verses, consists of a collection of eighty-six pākas and avalehas, preceded by an exposition on the preparation of a pāka and various rules connected with this subject (2–17).

Sources are not referred to, except once (465–466: pāthāvaleha from the *Āśvina-saṃhitā*).

Many pākas are attributed to particular authorities: the Aśvins (55–68; 214–228; 326–335; 374–382; 388–392; 424–430), Ātreya (232–239), Bhāradvāja (310–317; 352–357), Bhṛgu (165–169), Brahmā (336–344), Dhanvantari (487–499), Gahananātha (502–508), Gorakha (529–532), Mahādeva (469–482), and Śiva (33–39).

Noteworthy items of the materia medica are: ākalla (245), ākallaka (88; 134; 217; 279; 319; 408; 420; 433), arkakarabha (24), asāla (345), cīṇkabābā (88), copacīṇī (220; 310; 318), jhīṇjhīṇī (151), kabābā (235), kabābaka (448), kallaka (59), karabha

(97), kauñca (76), khasaphala (24), khurāsāna (235), khurāsānikā (24), kuhū (25), lobāna (220), mājū (200), mājūphala (24), mastakī (97; 220), and siñāvāsika (211).

Information on the author is not available.

PĀKAPRADĪPA by Ravidattavaidya.⁶⁵ Probably a modern work.

PĀKĀRNAVA.⁶⁶ This work⁶⁷ contains the recipes of fifty-three pākas.⁶⁸ Some of these are: āhaphenapāka, akalakarāpāka, araḍūśāpāka, bhlāvāpāka,⁶⁹ dālacīnīpāka,⁷⁰ kauchapāka,⁷¹ kuḍāpāka,⁷² rīṅgañīpāka,⁷³ sālimapāka,⁷⁴ and sopārīpāka.⁷⁵

One of the pākas described, the godhūmapāka, is said to derive from Rudra and was also proclaimed by Svayambhū for the benefit of Pārvatī.⁷⁶ Opium (ahipheña), sarsaparilla (copacīnī), and rose water (gulābapāka) are mentioned.

Works and authors quoted are: *Ānandamālā* (by Ānandabhāratī), *Bhāvaprakāśa*, *Manoramā*,⁷⁷ *Ṭoḍarānanda*, *Vaidyavallabha*,⁷⁸ Vaṅgasena, and *Yogacintāmaṇi*.⁷⁹

The references to the *Bhāvaprakāśa* and *Ṭoḍara* prove that the work cannot be earlier than about A.D. 1600.⁸⁰ The MS is written on paper that may be about two hundred years old.⁸¹

PĀKASAMGRAHA.⁸²

PĀKĀŚĀSTRA, anonymous.⁸³

This work deals with the preparation of various dishes and gives their medicinal properties. It begins with a bhaktādi prakaraṇa; the second prakaraṇa is about phalaśā-kādi; the treatise ends with a bhojanaprakaraṇa.⁸⁴

Some of the preparations described in the bhaktādi prakaraṇa are: maṇḍa, yūṣa, sūpa, pāpara,⁸⁵ pāyasa, polikā, maṇḍikā, yamalarotikā, pūrikā, kacavallī, vaṭaka, pakvavaṭī, pānaka, rāgakhāṇḍava, śikhariṇī, vāsavaṭī, phenikā, laḍuka, bindumodaka, dugdhakarāñjikā,⁸⁶ lāpasī,⁸⁷ candrahāsī, jalebī, kasāra,⁸⁸ koharī, bahurī, and umbikā.⁸⁹

The description of jalebī in this *Pākaśāstra* was regarded as the earliest one known by P.K. Gode.⁹⁰

The only authority quoted is Nala.⁹¹

The manuscript of this work dates from A.D. 1677/78.⁹²

PĀKĀŚĀSTRA by Bhīmasena.⁹³

Subjects dealt with are: the mode of forming clarified oil from the milk of jack fruits and from bananas; the preparation of ghee, curds and buttermilk; asclepias berry and wild palma christi shrub; the preparation of a curry from the seeds of the nimba tree that is not bitter; the preparation of pulse dishes; the use of the juices of lime and tamarind; the preparation of various cakes; the preparation of pāyasa and various pānakas.⁹⁴

The author calls himself Pāṇḍusūnu and Pavana- or Samīraṇasūnu (i.e., Bhīmasena).⁹⁵ The work, said to have been written in Virāṭanagara,⁹⁶ is called a sūpa-tantra.⁹⁷

The Pāṇḍavas lived in the thirteenth year of their exile, disguised as servants, at

the court of Virāṭa, king of the Matsyas; Bhīmasena served as the cook of the royal household.⁹⁸

Other works attributed to Bhīmasena are the *Abhidhānacandrikā*,⁹⁹ *Vaidyabhūṣaṇā*,¹⁰⁰ and *Vaidyabodhasaṃgraha*.¹⁰¹

The Bhīmasena who wrote the *Abhidhānacandrikā*, *Pākāśāstra* or *Sūpaśāstra*, and *Vaidybhūṣaṇā* lived in the nineteenth century according to A. Rahman.¹⁰²

PĀKĀŚĀSTRA by Devīsiṃha.¹⁰³

PĀKĀŚĀSTRA by Jayagovinda.¹⁰⁴ This work, written in Hindī, deals with the preparation of various dishes for a feast and describes their physiological effects.¹⁰⁵

The author enjoyed the patronage of a certain Hṛdayanarendra.¹⁰⁶

PĀKĀŚĀSTRA by Śrīmalla.¹⁰⁷

PĀKĀŚĀSTRA by Vindu.¹⁰⁸

PĀKASUDHĀKARA.¹⁰⁹ Quoted in the *Pākamārtanḍa*.

PĀKĀVALĪ.¹¹⁰ Several texts of this title are known.¹¹¹

One of these texts, edited under the title of *Pākāvalī*¹¹² and by an unknown author, is of the same type as a yogasāṃgraha, containing formulae for compound medicines against various diseases in the form of a pāka, avaleha, āsava, modaka, vaṭī, etc. Among the disorders mentioned are, for example, śleṣmapitta (36; 43), somaroga (46), and jaratpitta (36).

Noteworthy substances prescribed in this treatise are: opium (ahipheṇa: 5; 16; 41; 42; phaṇipheṇa: 48; sarpaphena: 41), ākalka (39), akalkara (16), ākalkara (4; 32; 45; 47), ākārakarabha (41), copacīnī (47), covacīnī (34), drekkā (25),¹¹³ dvandvaparnī (43),¹¹⁴ dvīpāśvā (47: = copacīnī), dvīpottharāśnā (34: = covacīnī), gulāba (42), hemāmbhodhara (13),¹¹⁵ khākhṣa (28; 41), mastakī (38; 43), pārasī vacā (43),¹¹⁶ uṣṭrakāṇṭaka (45), and uṣṭraphala or -phalā (42).

Two recipes for a śaikhadrāva are given (31–33).

The only treatise quoted is the *Rasārṇava* (23).

The above evidence indicates that this *Pākāvalī* is later than the *Śārngadharaśaṃhitā* (jaratpitta; ākārakarabha) and Bhāvamiśra (copacīnī; pārasī vacā). The presence of a recipe for the preparation of rose water (gulābapāka) and the two recipes for the preparation of a mineral acid (śaikhadrāva) point to a period of composition not earlier than the seventeenth century.

PĀKĀVALĪ by Govindarāja, son of Nāganātha.¹¹⁷

PĀKĀVALĪ by Kāśinātha.¹¹⁸

PĀKĀVALĪ by Kulāvataṃsa.¹¹⁹

PĀKAVIDHI by Divākaracandra.¹²⁰

SŪDAŚĀSTRA.¹²¹ A work of this name on cookery is quoted or referred to by Anatakumāra,¹²² Cakrapāṇidatta,¹²³ Hārāṇacandra,¹²⁴ Jejjāta,¹²⁵ Kṣīrasvāmin,¹²⁶ Niśca-

lakara,¹²⁷ Rāyamukuta,¹²⁸ Śivadāśasena,¹²⁹ Śrīdāsapaṇḍita,¹³⁰ Śrīkaṇṭhadatta,¹³¹ and Tōḍara.¹³² Some of these quotations may be from Nala's *Pākadarpaṇa*.

Bhavyadatta's *Yogarātnākara* contained a sūdaśāstrapariṣheda.¹³³

SŪPAŚĀSTRA.¹³⁴ A *Sūpaśāstra* is quoted in Vācaka Dīpacandra's *Lariḡhanapathyanirṇaya*¹³⁵ and Vopadeva's *Siddhamantraprakāśa*.¹³⁶

Chapter 2

Works on nāḍīśāstra

ABHINAVANĀḌĪTANTRA by Viśvanāth Dvivedī.¹

BHĀRATĪYANĀḌĪVIJÑĀNA by Prabhākaradevaśarman Caṭṭopādhyāya² is a modern monograph on the pulse in about 500 verses, divided into seven chapters.

Chapters one to four deal with general aspects of the examination of the pulse and the recognition of disorders of the doṣas. Chapter five is about pulses which indicate a fatal outcome within a specified period of time and about special cases which, although seemingly grave, are prognostically favourable. Chapter six describes the pulses characteristic for a long series of diseases and chapter seven signs indicating the approach of death.

The author does not indicate his sources,³ but a large part of his treatise is based upon the works of Kaṇāda, Rāvaṇa and others.⁴

The colours of the vāta-, pitta- and kaphanāḍī are described as respectively dark blue (nīla), pale (pāṇḍura) and white (śveta).⁵ The problem of the conflicting views on the location of the pulses of the doṣas with respect to the three fingers of the examiner⁶ is solved by declaring that no importance should be given to this location because the doṣas are sufficiently characterized by the movements of the pulse.⁷ The list of diseases together with their pulses is longer than in the works of Kaṇāda, Rāvaṇa and Bhūdharaḥṭṭa.⁸

The author was a Principal of the Calcutta College of Āyurveda and wrote his book between the years 1930 and 1934.

BHAVĀNĪNĀḌĪVIJÑĀNA.⁹

DHARMAVAIDYAKANĀḌĪPARĪKṢĀ by Merutuṅga.¹⁰
NĀḌĪBHEDA.¹¹

NĀḌĪCAKRA¹² is a remarkable treatise on the examination of the pulse, full of interesting details on this subject and other medical topics.

The work¹³ consists of 292 verses, arranged in twelve chapters (paṭala). It is composed in the form of a dialogue between Śiva and Pārvatī. The maṅgala is addressed to Śiva.

The introductory verse says that the *Nāḍītantra* will be expounded. The next few verses (2–6ab) relate that Pārvatī asked Śiva for instruction in the difficult art of nāḍīśāstra. Śiva replies that he will transmit to her the very subtle *Nāḍīcakra*.

The exposition begins with the statement that the nāḍīs are said to be 72,000 in

number¹⁴ by the great sages; authorities and works referred to are: Bhela, the *Caraka-sāstra*, Suśruta, the *Tantravistara*, the *Karṇikokta*,¹⁵ Yājñavalkya, and the *Yogaratanāvalīyaka* (7).

The importance of the science of the pulse is highlighted (10–12). Three diagnostic methods are mentioned: touching (*sparśana*), questioning (*praśna*) and examining (*darśana*) a patient (13–14).¹⁶ Touching, i.e., feeling the pulse at the wrist (*hastamūla*), ankle (*pādāmūla*), or both wrist and ankle, enables a physician to diagnose fever, disorders of the *doṣas*, the state of the digestive fire, ailments caused by fasting and waking at night, an intensive activity of the digestive fire (*atyagni*), deficiency of the semen (*hīnavīryatva*), disorders arising from fear (*bhaya*), grief (*śoka*) and confusion (*bhrama*), ailments arising from food of a particular taste,¹⁷ painful conditions brought about by (an excess of) physical exercise and sexual activity, and disorders of digestion (*aīrṇa*) (15–19ab). Questioning reveals the presence of *kukṣisūla*, *udāvarta*, *pārśvaśūla*, *bhagandara*, *sandhivāta*, *haemorrhoids* (*arśāṇsi*), the twenty urinary disorders (*mūtraroga*), *skhaladvīrya*,¹⁸ *śīroroga*, poisoning (*viṣasevā*), *antraniḥsrī*,¹⁹ *hastapādādīdāha*,²⁰ diseases of the penis, bladder and anus, and bleeding from the female genital organs (*raktasrāva bhagotthita*) (19cd–22ab). Examination discloses the presence of *kāsa*, *śvāsa*, eye diseases, *pitakāl*, *vraṇa*, *aṇḍavāta*, *śopha*, *pāṇḍu(rōga)*, *kāmila*, *pīnasa*, *asthibhaṅga*, *ūrubhaṅga*, *nāḍībhedā*,²¹ *galagraha*, *karṇārbuda*, *mūrchā*, *arśāṇsi* (*haemorrhoids*), *plīhan*, *ānāha*, *udara*, *sakthiśopha* (swelling of the thighs or legs), *galagranthi*, *upajihvā*, *masūrikā*, the eighteen forms of *kuṣṭha*, *ḍamaru*,²² and *gaṇḍamālikā* (22cd–25).

Finally, the pulse at the wrist is said to reveal all diseases, in the same way as the strings of a *viṇā* may produce all the *rāgas* (26–28ab).

Chapter two (28cd–46) mentions a *kanda* (bulbous structure), located somewhat downward from the navel, and measuring four *āṅgula* in breadth and two *āṅgula* in height,²³ as the place of origin of the 72,000 *nāḍīs* (28cd–32), which are divided into 30,000 male, 30,000 female, and 10,000 neuter ones, distributed, respectively, over the right, left and middle part of the body (33–34). One hundred and one among these are of more importance; thirteen is the number of the most prominent ones (35ab).

A main group of *nāḍīs* is formed by the pentad consisting of *Idā*, *Piṅgalā*, *Suṣumnā*,²⁴ located in the upper half of the body, together with *Subalā* and *Balā*, located in the lower half. *Idā* is found on the left, *Piṅgalā* on the right, and *Suṣumnā* in the middle. *Idā* is the main carrier of the *doṣas* in females; *Piṅgalā* is its counterpart in males. The *Suṣumnā*, the seat of *Brahmā*, transports *vāyu*, the basis of breathing (38–43ab). A human being is said to breathe 21,600 times each day and night (43cd–44ab).²⁵

Chapter three (47–55) describes where the main *nāḍī* should be examined by a physician: in males at the left, in females at the right side of the body, in cows at both sides of the nose, in horses at the ears, and in elephants at the mouth, tip of the nose, eyes, tail, and cheeks (51–52).

Chapter four (56–65) is concerned with the way of feeling the pulse and the exact places where to put the fingers (56–59). It describes in which disorders which pulse should be taken (60–63), and which pulse should preferentially be examined in the various periods of life (64–65).

Chapter five (66–80) is about characteristics of the pulse during the three parts of day and night (66) and during the six seasons (67–69ab). Each season endows the pulse with a characteristic type of pulsation (*gati*), resembling the way in which a particular animal moves about. The chapter proceeds with signs of the pulse connected with the preponderant taste of the food enjoyed;²⁶ these signs consist again of ways of pulsation resembling the gait of particular animals (69cd–72ab). A combination of the sweet and sour tastes gives rise to the same signs as those attributed to *kapha*, a combination of the pungent and saline tastes to the signs of *pitta* (72cd–73ab).²⁷ The tastes which should predominate in the food taken in a particular season are mentioned (75–76ab), as well as the relationships between the *doṣas* and the seasons (76cd–79ab) and those between the *doṣas* and the *mahābhūtas* (79cd–80).

Chapter six (81–92ab) describes the radial pulse (*jīvanāḍī*), the way to take it, the signs of the *doṣas*, signs indicating curability or incurability, and conditions in which it is either practicable or impracticable to feel the pulse.

Chapter seven (92cd–95) instructs the physician to diagnose *vāta* disorders with the index, *pitta* disorders with the middle finger, and *kapha* disorders with the little finger. Patients up to the age of fifty should be examined with the fingers of the right, older patients with those of the left hand.

Chapter eight (96–100) specifies the types of pulsation characteristic of disorders of one *doṣa* or two *doṣas*; each *doṣa* or combination of two *doṣas* presents a type of pulsation resembling the movement of a particular animal.

Chapter nine ((101–153) describes first the pulse that is typical of involvement of all three *doṣas* (101–102). Subsequently, it enumerates a group of ten *nāḍīs*: *Idā*, *Piṅgalā*, *Suṣumnā*, *Gāndhārī*, *Hastabīja*, *Pūṣā*, *Payasvinī*, *Alambu*, *Lakala*, and *Śaṅkhinī* (103–104ab).²⁸ The six *cakras* are mentioned,²⁹ their seats, and the parts of the body where the ten *nāḍīs* are found (104cd–108).

The remaining part of the chapter is devoted to anatomy. All the verses on this subject have been borrowed from the *Śāringadharasamhitā* (I.5), with the exception of 125–130, dealing with the seven layers of the skin and the diseases located in these layers.³⁰

Chapter ten (154–182) describes the five *mahābhūtas* (154–158), disorders arising from deficiency of one of these (159–160), the connections between the *mahābhūtas* and the *doṣas* (161), between the *mahābhūtas* and the seven bodily elements (162) and the tastes (163–164), the colours of the *mahābhūtas* (165), the *mahābhūtas* preponderantly present in particular constituents of the body (166–170), the ratios of the *mahābhūtas* in several groups of animals (171–180), and the connections between the *mahābhūtas* and the seasons (181–182).

Chapter eleven (183–273) is devoted to a classification of diseases. Almost the whole of this chapter has been taken from the *Śāringadharasamhitā* (I.7). Exceptions are verses 184–185,³¹ 186ab, 204–207,³² and 272–273.³³

Chapter twelve (274–292) describes that *Pārvatī* wonders how disorders of the *doṣas*, which have their seats in various parts of the body, can be diagnosed by means of the radial pulse. Being puzzled, she asks *Śiva* for elucidation.

Śiva informs her of some anatomical facts. He declares that the *mūlādhāracakra*³⁴ contains a *vidhigranthi*, which is the seat of *vāta*; similarly, the heart-lotus³⁵ has a

harigranthi, the seat of pitta; at the throat one finds a haragranthi, which is the seat of kapha.³⁶

The nāḍīs originate from the mūlakanda. Three among them, which have the nature of Brahṃā, Viṣṇu and Śiva, are more important, but the Suṣūmnā is the foremost. This very subtle Suṣūmnā runs from the seat of vāta to the seat of pitta, thence to the seat of kapha, to reach finally the Sahasrārā³⁷ at the top of the head. From the top of the head it goes downwards, branches off, and passes through the forehead, ears, the region between the eyebrows, nostrils, throat, and shoulders, ending at the wrists, where the pulse can be examined. Other branches pass through the sides of the abdomen and the hips, ending at the ankles, where the pulsations are perceptible.

The treatise ends with some verses explaining again that the state of the doṣas is diagnosed by help of the three fingers of the physician.

The author is unknown. The *Nāḍīcakra* must be later than the *Śārngadharaśaṃhitā*, on account of the large number of verses common to both works.³⁸

NĀḌĪCAKRANIDĀNA.³⁹

NĀḌĪCAKRANIRŌYĀ.⁴⁰

NĀḌĪCAKRAVIDHI.⁴¹

NĀḌĪDARPAṆA⁴² by Dattārāma,⁴³ son of Śrīkṛṣṇalāla,⁴⁴ is a treatise in 217 verses, arranged in three chapters (avaloka).

Although stressing the importance of aṣṭasthānaparīkṣā (1.6) and referring to various elements of this procedure (1.11, 12, 14), the work is exclusively devoted to nāḍīparīkṣā. The author emphasizes that the examination of the pulse can be learnt by practice only, not from books (1.24). The cause of the pulsation of the arteries is said to be the contraction of the heart; the circulation of the blood is known to the author (1.31–35).

Other subjects dealt with are: the three types of nāḍī (vāyuvahā, mūtraviḍasthira-savāhinī, āhāravāhinī; 1.37);⁴⁵ the total number of nāḍīs (thirty-five millions),⁴⁶ the gross nāḍīs (1,072 in number), and the twenty-four main nāḍīs (1.41–45); the places where to feel the pulse (1.46–55); suitable and prohibited times for the examination of the pulse; (2.1–3); suitable and unsuitable patients (2.6–7); the correct procedure for examining the pulse (2.8–20); the characteristics of a normal pulse (2.21); the deities presiding over the various pulses (2.22); the colours of the nāḍīs (2.23); the characteristics of the pulse in disturbances of the doṣas (2.26–59) and the author's own opinion on this subject (2.33–46); the pulses indicating curability and incurability or approaching death (2.60–95); the articles of food to be prescribed in patients with an abnormal pulse (2.99–106); the pulse in various disorders (3.1–28); the number of pulsebeats (3.29–41).⁴⁷

Sources are not mentioned, but the major part of Kaṇāda's *Nāḍīvijñāna* forms part of the *Nāḍīdarpaṇa*.

The *Nāḍīdarpaṇa* is quoted by Prabhakar Chatterjee in his *Bhāratiyaṇāḍīvijñāna*⁴⁸ and Satyadeva Vāsiṣṭha in his commentary on Rāvaṇa's *Nāḍīparīkṣā*.

Dattārāma was a resident of Mathurā.⁴⁹ The references to the functions of heart

and lungs and to the circulation of the blood enable us to assign the *Nāḍīdarpaṇa* to the nineteenth century. Edition d has two additional chapters on pulse-examination according to Yūnānī (twenty-four verses) and western medicine (eighteen verses).

NĀḌĪGRANTHA.⁵⁰

NĀḌĪĪVANA.⁵¹

NĀḌĪJÑĀNA attributed to Ātreya.⁵²

NĀḌĪJÑĀNADARPAṆA, a work on the pulse and some related subjects in 252 verses by Bhūddharabhaṭṭa.⁵³

The treatise covers all the subjects usual in a work on the pulse, but it deals with other diagnostic procedures as well, namely the examination of the eyes (netraparīkṣā; 222–228), tongue (jihvāparīkṣā; 229–230), nose (nāsikāparīkṣā; 231), faeces (malaparīkṣā; 232–234), urine (mūtraparīkṣā; 235–247), and menstrual discharge (ārtavaparīkṣā; 248–252).⁵⁴ This explains that the *Nāḍījñānadarpaṇa* has more verses on general aspects of medicine than the average text on nāḍīparīkṣā and that various types of parīkṣā are referred to in its introductory part as indispensable procedures which have to precede any therapeutic action.

The list of pulses characteristic for particular diseases (79–166) is much longer than in the monographs attributed to Kaṇāda and Rāvaṇa. The same applies to the list indicating a fatal outcome in general or death within a specified period of time (189–220).

The author does not refer to his sources by name, but a comparison with the treatises of Kaṇāda and Rāvaṇa learns that he has incorporated at least half of Kaṇāda's work and some verses of Rāvaṇa.

Fourteen main nāḍīs are mentioned by name: Idā, Pīṅgalā, Suṣumnā, Sarasvatī,⁵⁵ Vāruṇī,⁵⁶ Pūṣā,⁵⁷ Hastijihvā,⁵⁸ Yaśasvinī,⁵⁹ Viśvodarā,⁶⁰ Kuhū,⁶¹ Śaṅkhinī,⁶² Payasvinī,⁶³ Alambuṣā,⁶⁴ and Gāndhārī⁶⁵ (30–32).⁶⁶ Idā, Pīṅgalā and Suṣumnā are the most important among these, and Suṣumnā, located in the backbone and the head, is the foremost of the three (32–33). The frequency of the beats of the pulse in the various periods of life is described (50–53).⁶⁷ The pulse should be examined at six places: the hands, the feet and the temples (55), or at eight: the hands, the feet, the sides of the throat and near the two sides of the nose (56). The pulses felt at the sides of the nose and at the throat reveal particular disorders (57 and 59). The span of life as determined by the pulse is described (174–176).

The examination of the nose and of the menstrual discharge are rarely mentioned in other treatises.

No particulars are known about the author and his date. He is later, in any case, than the period of composition of the treatises attributed to Kaṇāda and Rāvaṇa.

NĀḌĪJÑĀNADĪPIKĀ.⁶⁸

NĀḌĪJÑĀNAPRADĪPIKĀ.⁶⁹

NĀḌĪJÑĀNAPRAKĀŚIKĀ.⁷⁰ The number of openings⁷¹ of the nāḍīs, which are connected with the hairs, and from which drops of sweat (gharmabindu) ooze out, is thirty-

five millions (3).⁷² One main nāḍī, the origin of all the others, is the pathway of vāyu, and has its root in the upper part of the body, while its branches reach downwards (4). The fourteen most important nāḍīs, which carry prāṇa, and are established in the jīvakośa, are: Idā, Piṅgalā, Suṣumṇā, Sarasvatī, Vāruṇī, Pūṣā, Hastijihvā, Yaśasvinī, Viśvodarī, Kuhū, Śaṅkhinī, Payasvinī, Alambusā, and Gāndhārī (10–13). Ten among these nāḍīs convey the ten kinds of vāyu. Idā, Piṅgalā and Suṣumṇā course in an upward direction; Gāndhārī and Hastijihvā provide movement to arms and legs; Alambusā and Yaśasvinī are located in the right, Kuhū and Śaṅkhinī in the left half of the body (14–16). The locations of the terminals (dvāra) of the ten (vāyu-transporting) nāḍīs: Idā ends in the left nostril, Piṅgalā in the right nostril, Suṣumṇā in the opening (randhra) (at the top) of the spinal column (vaṃśa), Gāndhārī in the left eye, Hastijihvā in the right eye, Pūṣā in the right ear, Yaśasvinī in the left ear, Alambusā in the mouth. Kuhū in the root of the penis, and Śaṅkhinī in the crown of the skull (17–19).⁷³

The ten kinds of vāyu are: prāṇa, apāna, samāna, udāna, vyāna, nāga, kūrma, krkara, devadatta, and dhanañjaya;⁷⁴ the first five form the more important group; prāṇa and apāna are the most important among them; prāṇa is more important than apāna (20–21); the nāḍīs in the ears perceive sounds, those in the eyes forms, those in the nose smells; the one situated in the tongue perceives tastes, those in the skin perceive sensations of touch; those in heart and mouth give rise to sound; manas, buddhi, etc., are established in the heart (22–23).

Gāndhārī is located behind Idā; it has the colour of a peacock's throat and runs from the left foot to the left eye (25). Hastijihvā lies to the front of Idā; it has the colour of an utpala (blue water-lily) and runs from the left part of the head to the big toe of the left foot (26). Pūṣā lies behind Piṅgalā; its colour is like that of a dark cloud; it runs from the right eye to the sole of the right foot (27). Alambusā lies to the front of Piṅgalā and is red in colour; it runs from the right eye to the big toe of the right foot (28). Yaśasvinī, lying in front of Piṅgalā, has the hue of a conch and runs from the right part of the head to the big toe of the right foot (29). Śaṅkhinī is located between Gāndhārī and Sarasvatī; it is golden in colour and runs from the left foot to the left ear (30). Kuhū is located between Vāruṇī and Pūṣā; it is white in colour and runs from the big toe of the right foot to the top of the head (31). The most important among these nāḍīs are Viśvodarī, Śaṅkhinī, Rāvanā, and Sarasvatī (32).⁷⁵ Suṣumṇā, located in the brahmarandhra, on the road to final liberation (muktimārga), is invisible (avyakta) and associated with Viṣṇu (33). The three main nāḍīs are Idā, Piṅgalā and Suṣumṇā; Suṣumṇā is foremost among them (34). Idā runs on the left side, Piṅgalā on the right side, and Suṣumṇā in the middle; all three are pathways of vāyu (35). Idā has the lustre of a conch and the moon, Piṅgalā is white and red (36). Idā is a seat of the moon, Piṅgalā of the sun, Suṣumṇā of the wind (marut); Idā is a seat of rajas, Piṅgalā of tamas, Suṣumṇā of sattva; Idā is associated with the night, Piṅgalā with the day (37). Idā has the nature of vāyu, Piṅgalā that of fire, while Suṣumṇā, lying on the pathway to the brahmadvāra (= brahmarandhra), has the nature of both (38).

The heart resembles an inverted lotus bud, decorated with perforations (39). Piṅgalā has the fire maṇḍala as its dwelling place (gocara) and is called devayāna (40).⁷⁶ Idā has the somamaṇḍala as its dwelling place and is called pitryāna (41).⁷⁷ The long

(series of) bone(s) in the back, extending from the anus to the head, and resembling the neck (daṇḍa) of a vīṇā, is called the brahmadāṇḍa (42). The delicate hole at its upper end is called brahmanāḍī; the subtle Suṣūmṇā lies between Idā and Pīṅgalā (43). The jīva is established in the body, which is at some places like a cakra, at other places like a kośa, or again like a jīvagrha (48). The jīva roams through the body, mounted on the prāṇas; it resembles a spider in its web (49). The ten seats (āyatana) of prāṇa are: the umbilical region, ojas, the anal region, semen, the blood, the temples, the head, the kāṇḍa, and the heart (51).⁷⁸ Viśvodarī is thirty-two hasta in length; that part of it which is present in the neck measures one hasta (52). The āmāśaya is located at a distance of ten hasta from this (part of Viśvodarī) and the pacyamānāśaya at a distance of ten hasta from the āmāśaya (53). The distance between pacyamānāśaya and pakvāśaya is ten hasta again; the guhyadeśa (region of the genitals and anus) measures one hasta; its nāḍī resembles the convolutions of a conch (54).

The ingested food passes through āmāśaya, pacyamānāśaya and pakvāśaya; the (digestive) fire is located above the pakvāśaya (55). The rasa derived from the food passes through the nāḍī of the navel and goes to all parts of the body, impelled by vāyu (56). The umbilical region has the form of a tortoise (kūrma); the eight limbs of this tortoise are connected with the eight mahānāḍīs; four among these are in the region of the back, four in the region of the chest (kroḍa) (57). Two of the nāḍīs in the back and two in the chest run upwards, the other four downwards; the nāḍīs running upwards split into two branches (pallava) in the region of the throat; one of these splits again into five smaller branches (58). The branches go to the eyes, nostrils, tongue, lips and ears; one nāḍī, coming from the back, is called ākuñcanakarī (59).⁷⁹ A nāḍī, coming from the shoulder region, goes to the hand and splits into five branches; this one too is called ākuñcanakarī (60). A nāḍī running downwards from the back splits into five branches for the toes and is called prasāraṇakarī (61).⁸⁰ The ninth limb of the tortoise is called liṅganāḍī; its two branches convey urine and semen (62). The tortoise lies in a transverse position in the umbilical region, its head pointing to the left and its tail to the right; its left legs point upwards, the right legs downwards (63). Two nāḍīs are present in its head, two in its tail, and five in each of its legs (64). Its mouth parts face upwards in women, downwards in men (71). For this reason a physician should examine the pulse of the right hand in males, that of the left hand in females (72).

NĀḌĪJĪNĀNAŚIKṢĀ by Kālīprasanna Vidyāratna Bhaṭṭācārya,⁸¹ a modern work.
NĀḌĪJĪNĀNAŚIKṢĀ by Haralāla Gupta.⁸²

NĀḌĪJĪNĀNATARANĠINĪ, a treatise on the pulse in 102 verses by Raghunāthaprasāda.⁸³

This work is in the form of a dialogue between a woman called Lolākṣī, daughter of a Gandharva called Pampayya who lived in Bilagrāma, and a physician who answers her questions on diagnostics by means of the pulse (5–8; 101–102).

The usual subjects are covered. Many verses are taken from the monographs on the pulse attributed to Kaṇāda and Rāvaṇa or are very similar to verses found there, although the author does not disclose his sources except mentioning Parāśara by name

(2).

The deities presiding over the pulses of vāyu, pitta and kapha are Brahmā, Śiva and Viṣṇu (10), or, according to another view, Vāyu, Sūrya and Candra (11). The difference in examining the pulse in male and female patients (the pulse of the right hand in males and that of the left in females) is mentioned and explained as due to the head of the kūrma (tortoise)⁸⁴ being directed upwards in females and downwards in males (16–18).⁸⁵ The pulse in diseases is hardly described (76–81), whereas the frequency of the pulse, dependent on the age of the patient, is elaborately dealt with (82–90).⁸⁶ The pulse is explained as brought about by rhythmic contractions of the heart which, with vāta as an intermediary, make the blood move through the vessels (91–92).

Raghunāthaprasāda was the son of Sītārāma and Lakṣmī and a pupil of Śrīnivāsa.⁸⁷ Sītārāma was the eldest of the three sons of Tāpīrāma, son of the physician Govardhana who descended from Bālāśarma, a brāhmaṇa of Kānya jubja lineage.⁸⁸

The *Nāḍījñānatarāṅgiṇī* is a modern work as appears from its description of the contraction of the heart as the origin of the pulse.⁸⁹

NĀḌĪJÑĀNAVIDHI⁹⁰ by Raghunātha Paṇḍita⁹¹ is a short treatise in twenty-two verses on the characteristics of the pulse in excitement of each of the three doṣas, in saṃnipāta, and in a short series of disorders. The author also describes the views of Caraka on the pulse in disorders of one doṣa, two doṣas, and saṃnipāta.⁹²

NĀḌĪJÑĀNAVIRŪPA.⁹³

NĀḌĪKARARATNADARPAṆA.⁹⁴

NĀḌĪLAKṢAṆA.⁹⁵

NĀḌĪLAKṢAṆA, ŚAḌVIDHA.⁹⁶

NĀḌĪMŪTRAMALANETRAPARĪKṢĀ.⁹⁷

NĀḌĪMŪTRANETRAPARĪKṢĀ.⁹⁸

NĀḌĪMŪTRAPARĪKṢĀ.⁹⁹

NĀḌĪNAKṢATRAMĀLĀ.¹⁰⁰ The nāḍī¹⁰¹ situated at the root of the thumb has an extension of three fingers (aṅgula) and the size of a barleycorn; it is connected with all parts of the body (1). The course of kapha in this wonderful nāḍī can be found between those of vāta and pitta (2). The course of pitta may be detected by means of the forefinger, that of kapha by means of the middle finger, and that of vāta by means of the ring finger (3). Taking the root (of the thumb) as the point of reference, the nearest pulse is that of pitta, followed by those of kapha and vāta (4). A physician should determine the nature of the vāta pulse first, subsequently that of kapha and pitta (5).

The characteristics of the normal pulses of pitta, kapha and vāta (6–7). Characteristics of abnormal pulses of vāta, kapha and pitta (8). An abnormal condition (vakragati) of the three pulses indicates disease, a normal (sama) condition health (9). The pulse of kapha is called after Brahmā, that of pitta after Viṣṇu, that of vāta after Īśvara (= Śiva); this is the opinion of Dhanvantari (10). The characteristics of the pulse indicating a disorder of vāta and pitta (11), pitta and vāta (12),¹⁰² kapha and pitta (13), pitta and kapha (14), kapha and vāta (15), vāta and kapha (16). The characteristics of the

pulse in disorders caused by vāta (17), kapha (18) and pitta (19). The characteristics of a particular type of irregular pulse (20).¹⁰³ The characteristics of a particular abnormal pulse indicating thirty-two disorders (doṣa) (21).¹⁰⁴ The characteristics of the pulse in a disorder called sūtikāvāyu (22).¹⁰⁵ Pulses indicating an (external) fever, internal fever, and a fever that has reached the bones (23). Characteristics of the pulse indicating a fatal outcome (24). The importance of determining the five main characteristics of the pulse (25–26).¹⁰⁶ Characteristics of the pulse indicating a favourable prognosis (27).

The author of the commentary, called *Nāḍīnirūpaṇā*, was Kṛṣṇa Sūri, son of Gopālācāryasūri, of Sātulūri lineage.¹⁰⁷

Authorities quoted in the commentary are Amara and Viśva.

NĀḌĪNIDĀNA or *Nāḍīnirṇaya*, a work in twenty-seven stanzas attributed to the Aśvins.¹⁰⁸

NĀḌĪNIRNAYA.¹⁰⁹

NĀḌĪNIRŪPAṆA.¹¹⁰

NĀḌĪPARIṆĀNA, compiled by Śrīnivāsācārya Ayyavārālu.¹¹¹

NĀḌĪPARĪKṢĀ by Agniveśa.¹¹²

NĀḌĪPARĪKṢĀ by Avadhūta.¹¹³

NĀḌĪPARĪKṢĀ attributed to Dattātreyā.¹¹⁴

NĀḌĪPARĪKṢĀ by Dhuṇḍhirāja.¹¹⁵

NĀḌĪPARĪKṢĀ by Gaṅgādhara.¹¹⁶

NĀḌĪPARĪKṢĀ by Govinda.¹¹⁷

NĀḌĪPARĪKṢĀ by Kaṇāda.¹¹⁸

NĀḌĪPARĪKṢĀ by Mandhara.¹¹⁹

NĀḌĪPARĪKṢĀ by Mārkaṇḍeya.¹²⁰

NĀḌĪPARĪKṢĀ by Nañjarāja.¹²¹

NĀḌĪPARĪKṢĀ by Pūjyapāda.¹²²

NĀḌĪPARĪKṢĀ by Rāmacandra Somayājīn, son of Agnicit Sūryadāsa of Naimiṣāraṇya.¹²³

NĀḌĪPARĪKṢĀ ascribed to Rāvaṇa,¹²⁴ a treatise on the pulse in ninety-six verses.

The maṅgala is addressed to Indirā, i.e., Lakṣmī. The second verse refers to aṣṭasthānaparīkṣā.

The subjects dealt with are: the jīvanāḍī (i.e., the radial artery), called thus by Nandī(n),¹²⁵ located in the forearm and connected with all parts of the body; this jīvanāḍī, when examined at the base of the thumb, reveals all types of disturbances of the doṣas (3–5); the correct way of examining the pulse in men and women at the wrist and at the ankle (6–10); the three pulses of the doṣas in relation to the three fingers of the examiner, their characteristics when the doṣas are in balance and when they are excited (11–14); qualities of the pulses of the normal and the excited doṣas (15–19); the pulse in a healthy person and in incurable diseases (20–23); the pulse in

various disorders (24–38); the qualities of the pulse when the doṣas are staying in their respective seats, when increased, decreased, or disturbed in various ways (39–45); the pulse in various disorders (46–67); pulses indicating incurability or death within a specified period of time (68–90); characteristics of a dying person (91–93); the number of pulsations compatible with life (94); the pulse in a fever which has reached the innermost parts of the body (95); the duty of a physician to withhold treatment from a patient after recognizing the approach of death (96).

Rāvaṇa's treatise on the pulse is less systematically arranged than that of Kaṇāda. It is probably quoted by Āḍhamalla and Kāśīrāma.¹²⁶ Rāvaṇa is mentioned in Kapilamiśra's *Nāḍīprabodhana*.

A modern Sanskrit commentary on the work, called *Vivṛti*, was written by Satyadeva Vāsīṣṭha.¹²⁷

Authors and works quoted or referred to in this commentary are: Amara (38; 87), *Añjananidāna* (49; 63), *Aṣṭāṅgaḥṛdayasaṃhitā* (26), *Āyurvedaśāstra* (10), *Basavarājīya* (5; 8; 17–18; 20; 21; 23; 29; 31–32; 74; 86; 87), *Bhagavadgītā* (9; 10), Bhāskara's *Siddhāntaśiromaṇi* (10), *Bhāvaprakāśa* (46), Caraka (often), Kaṇāda (often), *Liṅgapurāṇa* (4), *Madhukoṣa* (64), *Nāḍīdarpaṇa* (34), *Nāḍīprakāśa* (83; 86), *Nidāna* (31; 57), Nilakaṇṭha's *Prasānatantra* (34),¹²⁸ Patañjali (34), *Rasavaiśeṣika* (24–25), *Rgveda* (7; 10), *Śatapathabrāhmaṇa* (8), Suśruta (often), Videha (64), *Yajurveda* (10; 92), Yāska (34), and *Yogaratanākara* (74; 75; 77; 84–85; 87–88).

The two main teachers of the author were Nāthūrāmamaudgalya, son of Gokula, pupil of Gaṇanātha, and Tilakarāmaśarman, son of Sukharāma, pupil of Arjunamiśra.¹²⁹

The following elements of Rāvaṇa's *Nāḍīparīkṣā* are absent from Kaṇāda's *Nāḍīvijñāna*:¹³⁰ the term jīvanāḍī and its attribution to Nandi(n); the reference to aṣṭasthānaparīkṣā; the differences in the examination of the pulses in men and women. The series of diseases mentioned together with the characteristics of the pulse observed in them is longer than in Kaṇāda's work.¹³¹

Nothing is known about the real author of the text.¹³²

The quotations from Rāvaṇa's *Nāḍīparīkṣā* by Āḍhamalla, if from this text and not from a floating tradition,¹³³ suggest a date anterior to the fourteenth century.¹³⁴ The reference to aṣṭasthānaparīkṣā seems to contradict such an early date since this subject is not mentioned in medical treatises until the beginning of the sixteenth century.¹³⁵

NĀḌĪPARĪKṢĀ by Śrīvātasya rājabhiṣak.¹³⁶

NĀḌĪPARĪKṢĀ compiled by Vipinavihārīn Gupta.¹³⁷

NĀḌĪPARĪKṢĀ by Yogīśvara.¹³⁸

NĀḌĪPARĪKṢĀ, anonymous.¹³⁹

NĀḌĪPARĪKṢĀDĪCIKITSĀKATHANA by Ratnapāṇīśarman, son of Gaṅgolī Saṃjīveśvaraśarman, patronized by Chattrasiṃha of Mithilā. This work is a treatise on the examination of the pulse and on therapy in 552 verses, arranged in five chapters (vilā-

sa). The order of the diseases in this treatise is odd; it ends with a rasaprakaraṇakīrtana. It has been composed after A.D. 1550.¹⁴⁰

NĀḌĪPARĪKṢĀJNĀNĀDI.¹⁴¹

NĀḌĪPARĪKṢĀLAKṢAṆA.¹⁴²

NĀḌĪPRABODHA by Rāmacandra Vājapeyin,¹⁴³ son of Sūryadāsa and pupil of Śrībhārati, a treatise in 158 verses, composed in A.D. 1446.¹⁴⁴

NĀḌĪPRABODHAKA by Kavirāja Kṛpālamīśra or Kṛṣṇamīśra Pañcendra.¹⁴⁵

NĀḌĪPRAKARAṆA by Kaṇāda.¹⁴⁶

NĀḌĪPRAKARAṆA by Śivadāsa, in thirty-eight stanzas.¹⁴⁷

NĀḌĪPRAKARAṆA from the *Vaidyabhūṣaṇa Bhīmarāva*.¹⁴⁸

NĀḌĪPRAKARAṆA or *Nāḍīparīkṣā*, anonymous.¹⁴⁹

NĀḌĪPRAKĀŚA by Dattarāma.¹⁵⁰

NĀḌĪPRAKĀŚA from the *Gautamīyatantra*.¹⁵¹

NĀḌĪPRAKĀŚA by Govinda.¹⁵²

NĀḌĪPRAKĀŚA by Kaṇāda.¹⁵³

NĀḌĪPRAKĀŚA, compiled by Pītāmbarasena.¹⁵⁴

NĀḌĪPRAKĀŚA by Rāmarāja,¹⁵⁵ son of Ratnadeva.¹⁵⁶

NĀḌĪPRAKĀŚA by Śaṅkarasena¹⁵⁷ Kavirāja, a work in three¹⁵⁸ or four¹⁵⁹ chapters (uddyota), based on Kaṇāda's *Nāḍīvijñāna*. It quotes a large part of Kaṇāda's verses,¹⁶⁰ frequently in a changed order, and comments on them, thereby comparing Kaṇāda's views with those of other authorities. Śaṅkarasena enlarges on some subjects, in particular the seasons and the causes of excitement of the doṣas. Chapter three contains sections on the examination of the menstrual discharge, semen, urine, nose, eyes, and tongue, which are subjects not dealt with in Kaṇāda's work. Chapter three ends with the statement that the art of feeling the pulse can be learnt only by concentrating one's mind in the same way as in yoga. Chapter four is, apart from the first few verses, omitted in edition b and replaced by an exposition on yoga and breathing. The full Sanskrit text of this chapter and its translation are found in edition c; it consists of an exposition on prognostic signs derived from characteristics of the breathing of the patient.¹⁶¹

Sources quoted are *Jāmala* (chapter four), the *Prayogacintāmaṇi*¹⁶² (88: on the examination of the urine and other types of parīkṣā), (the *Nāḍīprakāśa* of) Rāmarāja (20; 85), and Suśruta (50: on the excitement of the doṣas and blood; 86: on the menstrual discharge; 87: on semen). The *Dattātreyasaṃhitā* was also among Śaṅkarasena's sources.¹⁶³

Śaṅkarasena's *Nāḍīprakāśa* is quoted in Jīvānandavidyāsāgara's commentary on Kaṇāda's *Nāḍīvijñāna*. Śaṅkarasena is referred to in Kapilamīśra's *Nāḍīprabodhana*.¹⁶⁴ The *Nāḍīprakāśa* quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva* and Lakṣmīrāma's commentary on the *Siddhabhṣajamaṇimālā* is Śaṅkarasena's work. An unspecified *Nāḍīprakāśa* is cited in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*.

Śaṅkarasena belonged to the medical caste called Ambaṣṭha¹⁶⁵ and was the son of Śrīpati, a descendant of Duhisena.¹⁶⁶ He lived in Bengal¹⁶⁷ and wrote his work for his friend, Kavirāj Sānanda.¹⁶⁸

The *Nāḍīprakāśa* was composed towards the end of the nineteenth or in the beginning of the twentieth century.¹⁶⁹

NĀḌĪSAMUCCAYA.¹⁷⁰

NĀḌĪŚĀSTRA.¹⁷¹

NĀḌĪŚĀSTRASAMGRAHA.¹⁷²

NĀḌĪTANTRA.¹⁷³

NĀḌĪTANTRA by Hārīta.¹⁷⁴

NĀḌĪTANTRA, ŚAḌVIDHA-.¹⁷⁵

NĀḌĪTANTRAVIDHI, ascribed to Dattātreyā.¹⁷⁶

NĀḌĪTARAṄGIṆĪ.¹⁷⁷

NĀḌĪTATTVAVIDHI, ascribed to Dattātreyā.¹⁷⁸

NĀḌĪVICĀRA.¹⁷⁹

NĀḌĪVICĀRAROGAGAṆANĀ.¹⁸⁰

NĀḌĪVIDHĀNA.¹⁸¹

NĀḌĪVIJÑĀNA, anonymous.¹⁸²

NĀḌĪVIJÑĀNA by Dvārakānātha Bhaṭṭācārya.¹⁸³

NĀḌĪVIJÑĀNA by Govindarāmasena, son of Kṛṣṇavallabhasena and grandson of Śrīpatīsena.¹⁸⁴

NĀḌĪVIJÑĀNA, ascribed to Kaṇāda,¹⁸⁵ is a monograph on the examination of the pulse in 116 verses.¹⁸⁶

The maṅgala is addressed to Śambhu, i.e., Śiva, whose five mouths revealed the five Vedas, i.e., Ṛg-, Yajur-, Sāma-, Atharva-, and Āyurveda. Maheśa, i.e., Śiva, transmitted his knowledge of the Vaidyaka, i.e., Āyurveda, to Dhātār, i.e., Brahmā or Prajāpati; Dhātār gave it to Turāṣāh, i.e., Indra, and Indra in his turn to Kaṇāda.

The nāḍīs of the human body are said to be thirty-five millions in number and to have the umbilical region as their place of origin; 72,000 among them transport the perceptions of the five senses and 700 the fluid derived from the food (annarasa); twenty-four nāḍīs only can distinctly be felt. The nāḍī in the right hand or foot is the one to be examined in particular.¹⁸⁷ A tortoise (kūrma), thought to be located in the umbilical region with its mouth directed to the left, its tail to the right, its left legs upwards and its right legs downwards, is the origin of the twenty-four nāḍīs accessible to examination; two nāḍīs proceed from its head, two from its tail, and five from each of its legs (3–9).

The right way to examine the radial pulse is described and the circumstances which are suitable or unsuitable to the procedure (11–13). The synonyms of the term nāḍī are enumerated (15) and the way to distinguish the pulse of the three doṣas when in balance or excited is described (16–18). The characteristics of the pulse in a healthy person are given, and those of a normal pulse during the morning, afternoon, evening and night (19–20). The verses which follow are on the qualities of the pulse in disorders

of one, two, and all three doṣas (21–30), on the pulses which indicate incurability or death within a specified period of time (31–49), curability in cases seemingly incurable (50–61), on the relation between the pulse and particular articles of diet, as well as foods with a particular taste (62–78). The treatise ends with a long series of stanzas on the pulse in various diseases (80–116).¹⁸⁸

Verses from Kaṇāda's treatise form part of Dattarāma's *Nāḍīdarpaṇa* and the section on nāḍīparīkṣā of Śrīkaṇṭhasūri's *Hitopadeśa*. Kaṇāda and his *Nāḍīvijñāna* are quoted in Gulrājsarmamiśra's *Viśikhānupraveśavijñāna*. Kaṇāda (i.e., the *Nāḍīvijñāna*) is often cited in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*. A *Nāḍīvijñāna* is quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva* and Yogendranātha's *Āyurvijñānaratnākara*.

Commentaries on Kaṇāda's *Nāḍīvijñāna* were written by Govindarāma,¹⁸⁹ Hariharanātha Śāstrin,¹⁹⁰ Śaṅkarasena,¹⁹¹ and Jīvānandavidyāsāgara.¹⁹²

Authorities quoted in Jīvānanda's commentary are: ¹⁹³ Amara (6), *Bhāvaprakāśa* (13; 70), Caraka, Dattātreyā (7; 8), *Gāruḍasvarodaya* (3), Govindarāma (81; 97),¹⁹⁴ Haima (89), Medinī (6; 80; 82; 100), *Nidāna* (91),¹⁹⁵ *Pārāśarīya* (3), *Rājjanighaṇṭu* (63), Rāmarāja (19; 23; 113),¹⁹⁶ Śaṅkarasena (18; 20; 26; 30; 81; 82; 83; 84; 93; 102; 110; 113),¹⁹⁷ *Śivasamhitā* (3),¹⁹⁸ *Sūkṣmasvarodaya* (3),¹⁹⁹ Suśruta, Vāgbhaṭa (70; 78), and *Viśva* (5).²⁰⁰

Jīvānanda's commentary records a large number of variant readings.

No particulars are known Kaṇāda and the date of his work.²⁰¹

NĀḌĪVIJÑĀNĪYA.²⁰²

NĀḌYĀDIPARĪKṢĀ by Rāmacandra Somayājīn.²⁰³ This work is probably identical with Rāmacandra Vājapeyin's *Nāḍīprabodha*.

NĀḌYUTPATTI by Śrīrāma.²⁰⁴

TRIDOṢANĀḌĪVIVARAṆA.²⁰⁵

Chapter 3

Various authors

AGHORA: *Vidyāvalī* or *Aghoravidyāvalī*, a work in āryā metre, which consists of sixteen chapters (adhikāra), and deals with several branches of medicine.¹

AGHOṢAMAṆI: *Mūlakacandraprakāśa*.²

AGNIVEŚA's *Añjananidāna*³ deals exclusively with nidāna.⁴

The work consists of 235⁵ verses, mostly ślokaś;⁶ the majority of these were composed by the author. After the introductory stanza, the causes of excitement of the doṣas, the signs of these when excited, and some other general subjects are dealt with (2–9). Verses 10–233 are about the nidāna of the various diseases. The influence of the *Mādhavanidāna* is distinctly traceable in the *Añjananidāna*,⁷ but many divergences can be noticed. The arrangement of the diseases resembles that of *Mādhava* most from jvara up to śotha (10–164). Subsequently, the number of differences increases. Since the *Añjanidāna* is much more concise than the *Rogaviniścaya*, some of the nosological entities described in the latter work are omitted.⁸

Sources are not referred to in the *Añjananidāna*.

The *Añjananidāna* is quoted in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nā-
ṭiparīkṣā*.

Compared with the *Mādhavanidāna*, the following additions are conspicuous: quotidian fever is said to pervade the body during fifty ghaṭīs⁹ (26); three viparyaya types of irregular fever are distinguished (26); a type of fever arising from kṣveḍa¹⁰ is described (30); laghu and guru types of fever are mentioned (32–33); saṃgrahaṇī is distinguished from grahaṇī (47); bhasmaka¹¹ is added to the varieties of ajīrṇa (57); vraṇyāma¹² is added to the series of vāta diseases (110); medoroga is supplemented by svabhāvadurbalatā¹³ (151); vṛddhi is broken up into kuraṇṭaka¹⁴ and vardhma¹⁵ (165–168); masūrikā is said to occur exclusively in children (209); dhvajabhāṅga, i.e., impotence (209), and other disorders of male sexual functioning are described (220–222).

Commentaries on the *Añjananidāna* are reported to have been written by Bālaśāstri Garde,¹⁶ Dattarām Caube,¹⁷ Gumana Rāma,¹⁸ Jayakṛṣṇamiśra,¹⁹ and Tripāthīśaṃkara.²⁰

Agniveśa is mentioned as the author in the first and the last verses. The real author remains unknown.²¹ Several nosological details are in favour of assigning the work to a period later than the eleventh or twelfth century. The only evidence as to the lower limit is provided by the date of some MSS (1752,²² 1793,²³ and 1794).²⁴

AKALĀṆKASVĀMIN: *Vidyāvīnoda*. This work by a Jain author refers to Bhāskara, Dharmakīrti, Pūjyapāda, and Virasena.²⁵

ANANTAKUMĀRA's *Yogarātnasamuccaya*²⁶ is a very extensive treatise, mainly dealing with therapy, and containing extracts from a large number of earlier authors and works quoted by name.

The work is written in verse, interspersed with prose passages, and contains about 10,000 stanzas, arranged in thirty chapters (*adhikāra*), the subjects of which are: (1) the *doṣas* (1–61); (2) *pañcakarman*, i.e., *sneha* (1–19), *sveda* (1–22), *vamana* and *virecana* (1–73), *basti* (1–123), and *nasya* (1–27); (3) *dhūma* (1–7), *gaṇḍūṣa* and *kavala* (8–12), *mūrdhataila* (12–23); (4) *raktamokṣaṇa* (1–78); (5) *kṣāra* and *agnikarman* (1–18); (6) *bhojana*, *viruddhāṇa*, *pratiṣiṣa* (1–129); (7) *snehapāka* (1–134); (8) *dravya* (1–1262); (9) *jvarādirogacikitsā*, on *jvara* (1–595), *raktapitta* (596–673), *aśṛgdara* (674–720), and *asthisrāva* (721–761); (10) *kāsādirogacikitsā*, on *kāsa*, *śvāsa*, and *hikkā* (1–287); (11) *rājayakṣmādirogacikitsā*, on *rājayakṣman* (1–108), *svarasāda* (108–146),²⁷ *arocaka* (147–193), and *praseka* (194–204); (12) *chardyadirogacikitsā*, on *chardi* (1–72), *hṛdroga* (72–156), *trṣṇā* (157–229), *mada*, *mūrchā* and *saṃnyāsa* (230–274); (13) on *arśas* and *udāvarta* (1–282); (14) *atisārādirogacikitsā*, on *atisāra* (1–224) and *grahaṇī*, together with *agnimāndya*, *ajīrṇa*, *alasaka* and *viṣūcikā* (225–494); (15) on *mūtrāghāta* and *mūtrakṛcchra* (1–198), *prameha*, *śarkarā* and *aśmarī* (199–327), *somaroga* and *mūtrātīsāra* (328–339); (16) *vidradhyādirogacikitsā*, on *vidradhi* (1–89), *vṛddhi* (90–168), *gulma* (169–499), *śūla* (500–580), *ādhmāna*, *ānāha*, and some related disorders (581–588); (17) *jalakūrmādirogacikitsā*, on *jalakūrma* (589–632), *plīhan* (633–683), and *udara* (1–152); (18) on *pāṇḍuroga* (1–71), *kāmalā*, *kumbhakāmalā* and *halīmaka* (72–134), *śōpha* (135–243), *visarpa* (244–409), *masūrīkā* (410–468), *visphota* (469–487), *śītapitta* and *amlapitta* (488–507), and *kṣudramasūrīkā* (508–514); (19) on *kuṣṭha* (1–241), *śvitra* (242–282), and *krimi* (283–355); (20) *vātādirogacikitsā*, on *vātavyādhi* (1–381), *vātaśōṇita* (382–530), *sṭhaulya* (531–549), *kārśya* (550–556), and *nidrā* (557–571); (21) *vandhyādirogacikitsā*, on *vandhyā* (1–35), *garbhīṇī* (36–320),²⁸ and *bālaroga* (321–576); (22) on warding off (*pratiśedha*) *bālagrahas* (1–282); (23) on warding off *bhūtonmāda* (1–29), *unmāda* (30–91), and *apasmāra* (92–151); (24) *netrarogādicikitsā*, on *netraroga* (1–515), *karṇaroga* (516–594), *nāsārōga* (595–642), and *mukharoga* (643–851); (25) *śīrorogacikitsā* (1–166); (26) *vraṇacikitsā*, on *vraṇa* (1–219), *bhagna* (220–270), and *dagdha* (271–280); (27) *bhagandarādicikitsā*, on *bhagandara* (1–39), *granthi* and *arbuda* (1–37), *ślīpada* (38–58), *apacī* (59–98), and *nāḍī* (99–112); (28) *kṣudrarogacikitsā* (1–89); *guhvarogacikitsā*, on *upadaṃśa*, *yonyarśas*, *piṭakā*, *niruddhamāṇi* (1–37), *yonivyāpad* and related disorders (38–74); (29) *viṣacikitsā* (1–410); (30) *rasāyana* (1–186) and *vājīkaraṇa* (187–255).

Though the author's main concern is therapeutics, the subject of *nidāna* is not neglected in this work. The treatment of most diseases is preceded by verses on their aetiology and symptomatology. Religious and astrological elements are quite common in Anantakumāra's therapy,²⁹ but, broadly speaking, his work can be characterized as belonging to the mainstream of āyurvedic tradition since *rasauśadhas* are nearly absent. Mercury is only rarely prescribed and opium seems to be unknown to the author.

The arrangement of the diseases differs entirely from the order introduced by Mādhava and has obviously been influenced by Vāgbhaṭa.

The *Yogaratanasamuccaya* is for the greater part a compilation from the works of predecessors, but verses that were probably composed by the author are not rare; verified passages from sources in prose are also found and even indicated as such.³⁰ Numerous borrowings are said to derive from some unspecified treatise (*tantrāntara*).

The sources quoted by name are:³¹ *Acyuta*,³² *Āgama*,³³ *Āgastya*,³⁴ *Agniveśa*, *Āgniveśya*, *Ālambāyana*,³⁵ *Amarakośa*,³⁶ *Amitaprabhīya*,³⁷ *Amṛtadhā*,³⁸ *Amṛtamālā*,³⁹ *Amṛtāñjali*,⁴⁰ *Amṛtaprabhīya*,⁴¹ *Ārogyaśāstra*,⁴² *Āryāsamuccaya*,⁴³ *Āśvinasamhitā*,⁴⁴ *Āśvineya*,⁴⁵ *Āśvinīya*,⁴⁶ *Aurabhra*,⁴⁷ *Bāhuśāla*,⁴⁸ *Bāhusaṅghā*,⁴⁹ *Bārhaspatya*,⁵⁰ *Bhadraśaunaka*,⁵¹ *Bhadravarman*,⁵² *Bhālukiya*,⁵³ *Bhāradvājīya*,⁵⁴ *Bharata*,⁵⁵ *Bhārgava*,⁵⁶ *Bhavaka*,⁵⁷ *Bhaviṣyatpurāṇa*,⁵⁸ *Bhaviṣyottarapurāṇa*,⁵⁹ *Bhela*,⁶⁰ *Bhīṣanmuṣṭi*,⁶¹ *Bhoja*,⁶² *Bhojarāja*,⁶³ *Bhojottara*,⁶⁴ *Bimbasāra*,⁶⁵ *Bindusāra*,⁶⁶ *Brahmacārīn*,⁶⁷ *Brahmāṇḍapurāṇa*,⁶⁸ *Brāhmīyasūtra*,⁶⁹ *Bṛhadbhoja*,⁷⁰ *Cākṣuṣa*,⁷¹ *Candrarā*,⁷² *Candraṭa*,⁷³ *Caraka*, *Carakanyāsa*,⁷⁴ *Catuṣṣaṣṭi*,⁷⁵ *Cikitsākalikā*,⁷⁶ *Cikitsārṇava*,⁷⁷ *Daśemānī*,⁷⁸ *Devalīya*,⁷⁹ *Dīpanīya*,⁸⁰ *Dravyakalpa*,⁸¹ *Dravyāvalī*,⁸² *Ekadravaya*,⁸³ *Eraṇḍakalpa*, *Gandhayukti*,⁸⁴ *Gaṇḍīrāriṣṭahārītakīvyākhyāna*,⁸⁵ *Gaurītantra*,⁸⁶ *Hārīścandra*,⁸⁷ *Hārīta*,⁸⁸ *Hārīṭya*,⁸⁹ *Hiranyākṣīya*,⁹⁰ *Indu*,⁹¹ *Īśānayoga*,⁹² *Jānuaka*,⁹³ *Jarjara*,⁹⁴ *Jātukarṇa*,⁹⁵ *Jīmūtasena*,⁹⁶ *Jitasena*,⁹⁷ *Jivaka*,⁹⁸ *Jivakī*,⁹⁹ *Kalyāṇa(ka)*,¹⁰⁰ *Kāñcīpuravāsīn*,¹⁰¹ *Kāñkāyana*,¹⁰² *Kārikā*,¹⁰³ *Kāśyapīya*,¹⁰⁴ *Kātyāyanīya*,¹⁰⁵ *Kharanāda*,¹⁰⁶ *Kharanādīya*,¹⁰⁷ *Kṛṣṇātreyā*,¹⁰⁸ *Kṣārapāṇi*,¹⁰⁹ *Kṣārapāṇīya*,¹¹⁰ *Kṣudrabhoja*,¹¹¹ *Kumārasamhitā*,¹¹² *Līnārthadyotanī*,¹¹³ *Mahābhārata*,¹¹⁴ *Mahāpāṭhaśuddhi*,¹¹⁵ *Mahāyāna*,¹¹⁶ *Mahendrakalpa*,¹¹⁷ *Mahodadhi*,¹¹⁸ *Manoramā*,¹¹⁹ *Manusmṛti*, *Mayamata*,¹²⁰ *Nāgārjuna*,¹²¹ *Nāgārjunīya*,¹²² *Nāmanīta*,¹²³ *Nārādīya*,¹²⁴ *Nārāyaṇīya*,¹²⁵ *Pālākāpya*, *Pārāśarya*,¹²⁶ *Pāṭhaśuddhi*,¹²⁷ *Prayogahrdaya*,¹²⁸ *Prayogakośa*,¹²⁹ *Prayogaratnākara*,¹³⁰ *Prayogārṇava*,¹³¹ *Prayogasamgraha*,¹³² *Prayogasāra*,¹³³ *Prayogasiddhi*,¹³⁴ *Rājāmārtandīya*,¹³⁵ *Rājavaidehīya*,¹³⁶ *Ratnajitasena*,¹³⁷ *Ratnāvalī*,¹³⁸ *Śacīmata*,¹³⁹ *Sahasrayoga*,¹⁴⁰ *Sahasrayogī*,¹⁴¹ *Sahasrayogīvyākhyā*,¹⁴² *Śākyabhikṣu*,¹⁴³ *Śālihotra*,¹⁴⁴ *Samgraha*, *Sārārṇava*,¹⁴⁴ *Sārasamkṣepa*,¹⁴⁵ *Sārāvalī*,¹⁴⁶ *Śarvatrāta*,¹⁴⁷ *Sarvatrāta*,¹⁴⁸ *Sāstrārṇava*,¹⁴⁹ *Sauśruta*, *Siddhasāra*,¹⁵⁰ *Siddhayoga*,¹⁵¹ *Siddhayogasamuccaya*,¹⁵² *Siddhayogasāra*,¹⁵³ *Śikhāyoga*,¹⁵⁴ *Śivaratnacūḍāmaṇi*,¹⁵⁵ *Ślokalampkāra*,¹⁵⁶ *Śrīdharmamuṣṭi*,¹⁵⁷ *sūdaśāstra*,¹⁵⁸ *Sundarī*,¹⁵⁹ *Suśruta*, *Uttaragārgya*,¹⁶⁰ *Vāhaṭa*, *Vaidehīya*,¹⁶¹ *Vaitaraṇa*,¹⁶² *Vararuci*,¹⁶³ *Vārtika*,¹⁶⁴ *Vṛddhahārīścandra*,¹⁶⁵ *Vṛddhahārīta*,¹⁶⁶ *Vṛddhakāśyapa*,¹⁶⁷ *Vṛddhakharanāda*,¹⁶⁸ *Vṛddhāśravas*,¹⁶⁹ *Vṛddhavihāṭa*, *Vṛddhaviḍeḥa*,¹⁷⁰ *Vyasana Gupta*,¹⁷¹ *Yoga*,¹⁷² *Yogakaraṇḍa*,¹⁷³ *Yogamālā*,¹⁷⁴ *Yogāmṛta*,¹⁷⁵ *Yogarāśi*,¹⁷⁶ *Yogaratanā*,¹⁷⁷ *Yogasāra*,¹⁷⁸ *Yogasārasamuccaya*,¹⁷⁹ *Yogaśataka*,¹⁸⁰ *Yogasiddhi*,¹⁸¹ *Yogaśīti*,¹⁸² *Yogasudhākara*,¹⁸³ and *Yogayukti*.¹⁸⁴

Mentioned in the text of the treatise are: *Amṛtamālā*,¹⁸⁵ *Bhela*,¹⁸⁶ *Brahmāṇḍa(purāṇa)*, *Indu*,¹⁸⁷ *Jātukarṇa*,¹⁸⁸ *Kṛṣṇātreyā*,¹⁸⁹ *Manu*, *Ravigupta*,¹⁹⁰ *Suśruta*,¹⁹¹ *Vāhaṭa*,¹⁹² *Videhādhipa*,¹⁹³ and *Yājñavalkya*.¹⁹⁴

The *Yogaratanasamuccaya* is quoted, anonymously, in the *Kairālī* commentary on the *Aṣṭāṅgahrdayasamhitā*.¹⁹⁵

Worthy of attention are the following features in the field of nosography: the mention of the disease called *asthīrāva* (9.721–761); *praseka* (11.194–204) as a

separate disease; the use of the synonyms *vāhikā* (14.65, 70, 72), *nirvāhikā* (14.61 and 77), *niścāra* (14.62), *niścāraka* (14.78 and 89), and *bimbisī* (14.64, 74, 79) for *pravāhikā*; the disease *jalakūrma* (17.589–632), probably identical with *jalodara*; the description of six types of *pāṇḍuroga* (the sixth arising from *loṣṭavibhedana*), quoted from a text called *Mahāyāna* (18.3); the elaborate description of *masūrikā*, on which subject the *Bhāradvāja* is quoted (18.410–418), which states that it is of nine types, but of eight only according to some of the authorities; in a citation from *Aurabhra* (18.419–427) eight types are described: *masūrikā*, *saṣapikā*, *ajakā*, *kodrava*, *kaṅgu*, *visphoṭaka*, *pāki*, and *visarpī*; remarkable is a formula against *masūrikā* said to be *paścātyajanapadaprasiddha*, i.e., well known in western countries; an epidemic form of *masūrikā* is also referred to (18.467); the description of a disease, distinct from *masūrikā*, called *ksudramasūrikā* or *matsyanāsā* (18.508–514), quoted from an authority named *Bāhusaṅghā*; *śītapitta* is regarded as identical with *amlapitta* (18.488–489); *makkalla* is called *markala* (21.233, 236, 238); the description of a disease called *vaṣṭiroga*, erroneously diagnosed by others as *aṣṭhīlikā*, *granthi* or *raktagulma* (21.302–312); the description of an unperforated anus in a newborn child (21.330: *advāraka guda*) from a work called *Prayogasiddhi*;¹⁹⁶ an elaborate description of the disease called *kṣīrālasaka* (21.387–396ab) and its treatment (21.396cd–407); the religious treatment of fever in children (21.421–432); a children's disease called *mukhadūṣikā*, characterized by the appearance of pustules on the face (21.496), quoted from the *Prayogasiddhi* again;¹⁹⁷ a children's disease called *nicūrikā*, characterized by the repeated appearance and quick disappearance of blisters (21.499); a children's disease called *viṣavajra*, characterized by burning and by itching pustules (21.500); a children's disease called *tuṅṇā*, characterized by an inflamed navel (21.503–504);¹⁹⁸ the description of a disease called *kuṇḍāla*, three varieties of which are distinguished (21.507–517); the description of several series of *bālagrahas* and the measures to ward them off, quoted from the *Nārāyaṇiyābālātantra*,¹⁹⁹ *Jīvaka's Bālātantra*,²⁰⁰ and an unspecified work (*tantrāntara*);²⁰¹ twenty-four diseases of the eyelids are enumerated and described (24, prose between 55 and 56), nine diseases of the junctures (*sandhi*) of the eyes (24, prose between 90 and 91), thirteen diseases of the white portion (*śuklabhāga*) of the eyes (24, prose between 99 and 100), five diseases of the black portion (24, prose between 135 and 136; 24.136–150), twenty-seven diseases of the *drṣṭi* (24, prose between 244 and 245), sixteen diseases affecting the whole eye (24, prose between 395 and 396), twenty-five diseases of the ears (24, prose between 515 and 516; 24.516; prose between 24.516 and 517), eighteen diseases of the nose (24.595–602 and prose passages), eleven diseases of the lips (*oṣṭharoga*; 24, prose between 645ab and cd), ten diseases of the teeth (*dantaroga*; 24, prose between 651 and 652), thirteen diseases of the roots of the teeth (*dantamūlāroga*; 24, prose between 689 and 690), six diseases of the tongue (*jihvāroga*; 24, prose between 742 and 743), eight diseases of the palate (24, prose between 763 and 764), eighteen diseases of the throat (*kaṇṭharoga*; 24, prose between 772 and 773), eight diseases affecting the whole oral cavity (*sarvamukhagataroga*; 24, prose between 800ab and cd), and nineteen diseases of the head (*śīroroga*; 25, prose at the beginning of the chapter).²⁰²

Noteworthy names of medicinal plants are: *ākūlabṛhaṭī* (8.549), *alakṣmī* (8.575),

amlabṛhatī (8.549),²⁰³ candrī (29.395),²⁰⁴ dhurdhūra (26.122),²⁰⁵ galocikā or gu-
lojikā (8.538),²⁰⁶ gandhalakṣmī (8.574),²⁰⁷ gauḍī (8.585),²⁰⁸ ghanastanī (29.395),
haritamañjarī (8.686),²⁰⁹ hemākulī (6.116), hrasvavallī (8.558), indurā (8.579), jharasī
(8.527–530),²¹⁰ kāravallī (19.311),²¹¹ karavanda (8.794 and 988),²¹² kṣṇanimba
(8.636), kṣudrapanasa (8.725),²¹³ kūkavṛkṣa (15.270), lakṣmī (8.572–574),²¹⁴ lāva-
ṇḍikā (8.588), mahātīla (8.325), mahāvallī (8.558),²¹⁵ mṛdupuṣpī (8.577), pañktimūlī
(20.445), paphaṇa (8.799), papphaṇa (21.218),²¹⁶ parvapattā (8.579), pītabarbara
(8.593), raktakāṇḍā (8.577), sadābhadrā (21.520),²¹⁷ sīñcantī (8.778),²¹⁸ śramaṇī
(8.580), śuklabarbara (8.593),²¹⁹ sūrāphala (8.799), śvetapākī (8.788), śvetavallī (8.
558), śvetī (29.395), toraṇa (8.798), toyalakṣmī (8.575), ucchāphala (8.799), utta-
makanyā (8.567; 19.189, 302, 317), uttuṇḍakī (8.813),²²⁰ vanasūraṇa (8.656),²²¹
vraṇarohī (21.520),²²² and vṛttapattā (8.581).²²³

The name of the author is mentioned at the end of the work. The maṅgala at its beginning indicates that he was a devotee of Viṣṇu, and probably a resident of Southern India because Śrīraṅga²²⁴ is referred to.

Anantakumāra's sources prove that his date is later than those of Tīsaṭa, Candrāṭa, and Bhojarāja, which means that he composed his work after the eleventh century. This upper limit is confirmed by a quotation from the *Mādhavadravayaguṇa*.²²⁵ The lower limit is difficult to establish in the absence of references to Anantakumāra by later authors. The quotations from a *Yogaratanasamuccaya* in the *Yogaratanākara* are not of much avail, because Candrāṭa's work of that name may be cited. The period of composition depends on the dates of the *Tantrasārasaṃgraha* which is quoted as *Nārāyaṇīya*, and the *Sahasrayoga*, also quoted by Anantakumāra. Anantakumāra's work may therefore have been compiled after the fifteenth or sixteenth centuries.

ANTARAṆGANĀRĀYAṆADĀSA: *Ratnamālā*.²²⁶

APRAMEYA: (1) *Vaidyagrantha*²²⁷ and (2) *Viṣavaidya*.²²⁸

ARUṆAGIRI, son of Rāmacandra, of Bhārgavagotra: *Guṇapāṭha*,²²⁹ a treatise on materia medica and some other subjects, such as anatomy and the constitutions.²³⁰ The author, who claims to be well versed in Vedānta, salutes Aruṇādrīśa, and was therefore probably a resident of Tiruvaṇṇāmalai in the South Arcot district of Tamiḷnāṭu or of some part near it.²³¹ This is confirmed by the dedication of his *Vaidyasāramu* to two deities residing in Aruṇācala.²³²

Aruṇagiri was a contemporary of king Devarāya II (A.D. 1423–1446) of Vijayanagara²³³ and thus belongs to the fifteenth century.²³⁴

Several members of Aruṇagiri's family lineage were active as writers of literary works.²³⁵ Dīṇḍimabhaṭṭa I, a maternal uncle, was the court poet of Devarāya I (A.D. 1406–1422); Rājanātha Dīṇḍima II wrote the *Sāḷuvābhyudaya*,²³⁶ and Dīṇḍima Sārvabhauma, his son, the *Rāmābhyudaya*,²³⁷ Aruṇagiri II was the author of the *Virābhadravijaya*,²³⁸ and Rājanātha III of the *Acyutarāyābhyudaya*²³⁹ and *Bhāgavatācampū*.²⁴⁰

AŚOKAMALLA(RĀJA): *Nighaṇṭusāra*.²⁴¹

BĀHAḌA: *Saṃnipātanidānacikitsā*.²⁴²

BĀHAṬA: *Rasamūlikānighaṇṭu*.²⁴³

BAKHAT SINGH: *Bakhatvilāsa*. The author was a king of Ajaigarh State in Madhya Pradesh.²⁴⁴

BALABHADRA: *Jvarapaddhati*.²⁴⁵

BĀLĀCĀRYA: *Suśrutasaṃhita*,²⁴⁶ a summary of the *Sūtra*- and *Nidānasthāna* of the *Suśrutasaṃhita*, with an attempt at summarizing other parts as well. The author praises Candrāṭa, Caraka, Dhanvantari, Suśruta, and Vāgbhaṭa in the opening lines.²⁴⁷

The *Suśrutasaṃhita* is referred to in Lakṣmīkuśala's *Vaidyakaśāstranaprakāśa*.

BALIBHADRA: *Vṃdasaṃgrahaśeṣa*.²⁴⁸

BAṆĀRATANAYA: *Bālabodha*.²⁴⁹

BHAIRAVĀNANDA: *Tantrasārāvali*.²⁵⁰

BHĀRATAKARṆA: *Tattvakaṇikā*, a part of a larger work called *Siddhauṣadhasaṃgraha*.²⁵¹ The author claims in the first few lines that āyurvedic medicines have a slow action, whereas the drugs he is going to describe cure diseases within a short time.²⁵² This means probably that the treatise mainly deals with *rasauṣadhas*.

BHĀRGA RĀMA: *Cikitsānavanīta*.²⁵³

BHĀRGAVĀCĀRYA: *Nāmasaṃgrahanighaṇṭu*.²⁵⁴

BHĀSKARA: commentary on the *Rasabhedīyapraśastārapradarśana*.²⁵⁵

BHAVADEVĀ: *Saṃnipātacandrikā*.²⁵⁶

BHAVĀNĪMĪŚRA: *Guṇaratnamālā*.²⁵⁷

BHĀVAŚĀRMAN: *Vyādhividhvaṃsinī*.²⁵⁸

BHĀVASĪMHA: *Vyādhividhvaṃsinī*.²⁵⁹

BHĪṢAGĀRYA: *Abhidhānamāñjarī*,²⁶⁰ a *nighaṇṭu*, chiefly concerned with synonyms of medicinal substances.

The work, the title of which is given at the beginning and end, is written in a variety of metres, and consists of 1,323 verses, arranged in four sections (*varga*). As stated by the author himself in the introductory and concluding verses, it is based on Vāgbhaṭa's *Aṣṭāṅgahṛdayasaṃhita*, in which respect it resembles the *Aṣṭāṅga*- and *Madanādinighaṇṭu*. The first three sections correspond to three chapters of the *Sūtrasthāna* of the *Aṣṭāṅgahṛdayasaṃhita*, which are mentioned by name in Bhīṣagārya's introduction, namely the chapters called *śodhanādigaṇasaṃgraha* (Sū.15), *annasvarūpavijñānīya* (Sū.6), and *dravadravayavijñānīya* (Sū.5).

The first and longest section, called *madanādigaṇavarga*, has thirty-two subsections and is chiefly devoted to medicinal plants. It agrees rather closely with the *śodhanādigaṇasaṃgraha* chapter of Vāgbhaṭa. Bhīṣagārya's groups of drugs are the same as those of Vāgbhaṭa, but he omits one of them (A.h.Sū.15.7), a compound group which

enumerates seven vargas with the same therapeutic effects.²⁶¹ Repetitions, which are frequent in Vāgbhaṭa's groups, are avoided by Bhiṣagārya, who also leaves out groups of drugs, such as, for example, triphalā.

Rather long strings of synonyms for each plant mentioned by Vāgbhaṭa are found in this work; another characteristic is the frequent distinction of more than one variety of plants regarded as of one single type in the *Aṣṭāṅgaḥṛdayasaṃhitā*. The therapeutic actions of the groups of drugs are listed at the end of each subsection, in conformity with Vāgbhaṭa.

The second section, called śūkadhānyādivarga, corresponds to Vāgbhaṭa's annas-varūpaviññānīya chapter. It has seven subsections, dealing with grains (śūkadhānya), pulse, sesamum, flax, etc. (śimbīdhānya), prepared foods (kṛtānna), flesh of various animals (māṃsa), vegetables (śāka), fruits (phala), and various medicinal substances, such as salts, etc., along with groups of substances, such as pañcagavya, etc. (auśadha). The fourth subsection of section two differs from the corresponding verses of Vāgbhaṭa by including numerous anatomical terms.

The third section, called toyādivarga, agrees with the dravadravyaviññānīya chapter of Vāgbhaṭa. It consists of five subsections, concerned with types of water (toya), milk and various dairy produce (kṣīra), the sugarcane and its products (ikṣu), oils (taila), and alcoholic drinks, including fermented beverages (madya). Some of the subsections contain more material than found in Vāgbhaṭa.

The fourth section, called saṃkīrṇavarga, which has no corresponding part in Vāgbhaṭa's work, has six subsections. The first of these is rather heterogeneous. The author remarks that he will enumerate in this subsection the synonyms of substances not yet dealt with.²⁶² It consists of synonyms of various organic and inorganic substances, odoriferous plants, tissues, colours, etc. The second subsection, called saṃjñāvarga, gives sets of names for plants already described in the first section; agni and all its synonyms may, for example, be used to designate citraka, śīta and all its synonyms designate candana, etc. The third subsection, called ekārthavarga, is a list of names which are employed for only one plant. The fourth subsection, called dvārthavarga, opens the homonymic part of the *Abhidhānamañjarī*, in which the meanings of the anekārthas are, as usual, given in the locative. The fifth subsection, called tryārthavarga, is a list of names of medicinal substances which have three meanings each. The sixth and last subsection, the caturārthavarga, begins with series of names of medicinal substances which have four, five, etc., meanings each. The last part contains verses on the synonyms for weights and measures, on rules prescribing the quantities of the ingredients of compound drugs, and on the synonyms for particular medicinal preparations.

The concluding verses give information on the author and his descent. The work ends with verses in praise of Dhanvantari, who was incarnated again as Divodāsa in Kāśī.

The *Abhidhānamañjarī* is profusely quoted as *Mañjarī* in the Kairālī commentary on the Uttarasthāna of the *Aṣṭāṅgaḥṛdayasaṃhitā*. Bhiṣagārya is praised in the anonymous *Tantrayukti*.

Noteworthy are the varieties of plants²⁶³ regarded as of one type by Vāgbhaṭa: two types of apāmārga (76–77): apāmārga and karkaṭapippalī; two types of āragvadha²⁶⁴

(56–57): āragvadha and rājāhva²⁶⁵ = karṇikāra; two types of ādraka (343–344): ādraka and āmrādraka;²⁶⁶ two types of arka (294–295): arka and rājārka; two types of ativiṣā (329–330): ativiṣā and śvetaraktaviṣā; five types of balā (98–102): balā, bṛhadbalā, atibalā, nāgabalā, kākabalā; two types of bhallāta (356–357): bhallāta and jambukabhallāta; two types of bhallūka (268–269): bhallūka = śyonāka, and phalgū; three types of brāhmī (400–402): brāhmī, maṇḍūkapaṇṇī, mahāmaṇḍūkapaṇṇī; two types of caṇḍā (395–396): caṇḍā and pītapuṣpikā; two types of cillī (807–808): cillī and hrasvapatrā cillī; three types of dantī (40–42): dantī, dravantī, nāgadantī;²⁶⁷ two types of darbha (245–246): darbha and rājadarbha; two types of devadāru (64–65): devadāru and mahādāru; three types of dūrvā (103–104): dūrvā,²⁶⁸ sitadūrvā²⁶⁹ and gandhadūrvā; two types of gundrā (110–111): gundrā and gundrāṇī; two types of hapuṣā (320–321): hapuṣā²⁷⁰ and śvetaphalā hapuṣā;²⁷¹ many types of kadālī (282–290); three types of kampilyaka (58–60): kampilyaka, hemadugdha, karikuṣṭha; three types of karaṇja (25–27): karaṇja, vallikaraṇja, pūtika; two types of kāsamarda (314–315): kāsamarda²⁷² and sitakāsamarda; two types of kaṭurohiṇī (194–195): kaṭurohiṇī and pītarohiṇī; two types of khadira (215–216): khadira and gaurakhadira; three types of kharabusa (311–313): kharabusa = droṇa,²⁷³ rājakaṣavaka, mahādroṇa; four types of koṣātakī (22–24): koṣavatī, pītapuṣpakoṣavatī, karkoṭakī = dhāmārgava, dhārākoṣātakī;²⁷⁴ two types of kurūṭa (270–271): kurūṭaka and kaṇḍūla;²⁷⁵ two types of kuṣṭha (62–63): kuṣṭha and kaubera; three types of kuṭheraka (305–307): white-flowered = vaikuṇṭha, dark-flowered = paṇāsa, and mahākuṭheraka; four types of laṣuna (822–825): laṣuna, kṣīrapalāṇḍu, grājanaka, raktalaṣuna; two types of madana (1–2): madana and piṇḍitaka; two types of meṣaśṛṅgī (221–222): meṣaśṛṅgī and setudruma;²⁷⁶ two types of misi (69–70): misi and miśreyā; three types of mūlaka (817–819): mūlaka, cānakya, caṇḍuka; three types of nimba (5–7): nimba, nimbāraka = dreka,²⁷⁷ kṛṣṇanimba;²⁷⁸ two types of palāśa (226–227): palāśa and vallīpalāśaka;²⁷⁹ three types of pāṭalī (198–200): pāṭalī, nīlapuṣpa pāṭala, śvetapāṭalī; two types of paṭola (192–193): paṭola and kūlaka; two types of pattūra (815–816): pattūra and kṣetraja pattūra; two types of pūga (233–234): pūga and mahākramuka; two types of rāsnā (66–67): rāsnā and mādhavapuṣpī; four types of śaṅkhiṇī (48–51);²⁸⁰ two types of sarala (277–278): sarala and tarala; four types of sarṣapā (36–39): sarṣapā, siddhārthaka, lohitasarṣapaka, kṛṣṇasarṣapā; two types of śiṃśapā (219–220): śiṃśapā and kuśiṃśapā;²⁸¹ two types of snuḥī (46–47): snuḥī²⁸² and veṇī;²⁸³ three types of sruvavr̥kṣa (202–204): sruvavr̥kṣa, kākataru, tāmrāsāra; two types of śyāmā (44–45): śyāmā and mahāśyāmā; three types of śyāmāka (440–442): śyāmāka, toyaśyāmāka, hastiśyāmāka; two types of tagara (96–97): tagara and bhūmikadamba; the description of takkolaka and māṛica (387–388); four types of tāla (223–225): tāla,²⁸⁴ hintāla,²⁸⁵ mahātāla,²⁸⁶ mr̥tyuphalākhyā hintāla;²⁸⁷ two types of tejasvinī (298–299): tejovatī and pārāvatapadī; two types of tilvaka (54–55): tilvaka²⁸⁸ and pratitilvaka; three types of tinduka (373–374): tinduka, kṛṣṇatinduka, kākenduka; two types of trapusa (11–12): trapusa and vanaja trapusa; three types of vaṃśa (812–814): vaṃśa, ṛṇavaṃśa = poṭagala, kīcaka; two types of viśālā (9–10): viśālā and mahāphalā viśālā; two types of vṛścīva (154–155): vṛścīva and śvetamūla vṛścīva.

The saṃkīrṇavarga refers to many plants which are not mentioned in the preced-

ing parts of the work; examples are: brahmadanḍī (1085), gandhatarāṇī (1059), japā (1130), pītayūthikā (1054),²⁸⁹ rāmatarāṇī (1055),²⁹⁰ śaṅkhayūthikā (1053),²⁹¹ tarāṇī (1054),²⁹² vanavāsantī (1052), and vāsantī (1051).²⁹³

Information on the author is chiefly found in the concluding verses of his work, where he mentions that his name is Nārāyaṇa Bhiṣaj, also called Bhiṣagārya. His father was a physician, Viṣṇu by name,²⁹⁴ of Bhāradvāja gotra,²⁹⁵ who lived in Uṇṭurur,²⁹⁶ situated three yojanas to the east of Gokarṇa.²⁹⁷

The verses at the end of the *Abhidhānamāñjarī*, which inform us about the descent of Bhiṣagārya, are repeated at the end of the anonymous *Tantrayukti*, where it is added that Nīlamegha, the author of the *Tantrayuktivivāra*, was a descendant of Bhiṣagārya. The *Abhidhānamāñjarī* is therefore earlier than the *Tantrayuktivivāra*. It is also anterior to the *Kairālī* commentary on the *Aṣṭāṅgahṛdayasaṅhita*, which often quotes it. The materia medica described in the *Abhidhānamāñjarī* points to a rather late date. Five types of balā, for example, would be very unusual for an early work.²⁹⁸ The numerous varieties mentioned are, in general, in favour of assigning the work to a period after the composition of the *Rājanighaṇṭu* and *Bhāvaprakāśa*, i.e., after the sixteenth century.

BHĪṢAṬĀCĀRYA: quoted as a medical author by Raghunandana Bhaṭṭācārya in his *Malamāsattva*.²⁹⁹

BHOLĀNĀTHA: *Āyurvedoktadravyaguṇābhidhāna*.³⁰⁰

BILHAṆA: *Manoramāvaidyaka*.³⁰¹

BODHIKAVI: *Paryāyamañjarī*.³⁰²

BRAJANĀTHAŚARMA: *Vaidyakaśāroddhāra*.³⁰³

This work is a therapeutic treatise, divided into twenty-three chapters (pariccheda).³⁰⁴ Chapters one to eighteen deal with the treatment of the diseases, arranged according to the order established by Mādhava. Chapter nineteen is concerned with the śodhana and māraṇa of eight dhātus (suvarṇa, raupya, tāmra, sīsaka, vaṅga, kārṇṣya, lauha, and abhṛaka), the preparation of rasasindūra, and the purification of a large number of medicinal substances. Chapter twenty is about rasāyana and vājīkaraṇa. Chapter twenty-one is devoted to substitutes for a number of drugs, substances regarded as essentially beneficial (svabhāvato hitāni), and a few mantras thought to increase the action of drugs. Chapter twenty-two deals with a long series of medicinal preparations,³⁰⁵ as well as with milk and dairy products, urine, and oils. Chapter twenty-three is about pañcakarma and related procedures, and also about the various ways of examining a patient.³⁰⁶

Prescriptions of an āyurvedic type and rasayogas are found side by side in the *Vaidyakaśāroddhāra*. The author incorporated a few mantras.³⁰⁷ The materia medica does not present noteworthy features.

Sources are occasionally referred to: *Bhairavatantra* (276),³⁰⁸ Caraka (363 and 400),³⁰⁹ *Rasārṇava* (79), *Ratnapradīpa* (24), and *Vāgbhaṭa* (362).³¹⁰

Snāyuroga (236), somaroga³¹¹ and mūtrātisāra (270–272) are known to the author. The chapter on strīroga (16) gives prescriptions which tighten the vagina, remove a

foul smell, increase fertility, facilitate delivery, etc. Chapter nineteen describes the purification of jayapāla, the seeds of dhustūra,³¹² the seeds of vṛddhadāraka, kāphinga,³¹³ viṣatinduka and viṣamuṣṭika, the milky sap of snuḥī, bhallātaka, guggulu, hiṅgu, dantī, trivṛt, citraka, devaviṣa,³¹⁴ the bile of various animals, rasona,³¹⁵ śakrāśana,³¹⁶ and leeches.

The author does not mention his name. He is called Brajanāthaśarma by the copyist and was evidently a resident of Assam.³¹⁷

The date of composition remains unknown. The only complete MS dates from 1850/51.³¹⁸ The editors of the *Vaidyakaśāroddhāra* assume that its author is later than Gopālākṣṇa, who wrote the *Rasendrasārasaṃgraha*, and Śivādāsena.³¹⁹

BRHASPATI: *Jvarāvalī*.³²⁰

CAKRAPĀṆIDATTA: *Aśeṣatantrasaṃgraha*.³²¹

CAKRAPĀṆIDATTA, a namesake of the famous commentator on the *Carakasamhitā*, was the author of a medical lexicon, called *Śabdacandrikā*.³²²

The *Śabdacandrikā*³²³ enumerates only strings of synonyms, adding the Bengali names of medicinal plants in the margin.³²⁴ The work consists of 734 verses, arranged in nine chapters (varga). The maṅgala is addressed to Heramba.³²⁵

Chapter one (vṛkṣādivarga; 360 verses), by far the longest, deals with medicinal plants (4–337), types of plants, and names for their parts. Chapter two (svarṇādivarga; twenty-eight verses) is about inorganic substances, and some of vegetable or animal origin,³²⁶ chapter three (ghṛtādivarga; twenty-six verses) about dairy, products of the sugarcane, rice and other cereals, pulse, and some more articles of food, chapter four (bhūmyādivarga; fifty-seven verses) about kinds of earth, poisons, fishes and other aquatic animals, the elements, sun, moon, and various other subjects, chapter five (manuṣyavarga; fifty-six verses) about anatomical terms, chapter six (siṃhādivarga; ninety-six verses) about mammals, birds, and some other classes of animals, chapter seven (madyādivarga; thirty-two verses) about alcoholic and other fermented fluids, prepared dishes, etc., chapter eight (pañcakaṣāyādivarga; thirty-six verses) about a number of medical technical terms, and chapter nine (triphalādivarga; forty-three verses) about groups of substances.

The *Śabdacandrikā* was obviously modelled upon the *Amarakoṣa*. The major part of chapter one (4–311 and 338–360) corresponds to the vanaūśadhivarga of the latter work; it describes the plants in the same order and repeats the same synonyms, to which, however, many new ones are added. Verses 325cd–337 of chapter one, on lotuses and water-lilies, correspond to those on the same subject of the vārivarga of the *Amarakoṣa*. Chapters two and three agree with verses from the vaiśyavarga. The subjects of chapter four are mostly from the vārivarga, those of chapter five from the nṛvarga, those from chapter six from the siṃhādivarga. The verses of chapter seven agree partly with the sūdravarga, and those of chapter eight partly with the vaiśyavarga. On all these subjects the *Śabdacandrikā* adds synonyms from unknown sources to those found in Amarasinha's work. The names for groups of substances, found in chapter nine, are absent from the *Amarakoṣa*.

Cakrapāṇidatta acknowledges his indebtedness to Amarasiṃha's lexicon in one of the introductory verses. The concluding verse refers physicians in search of information not contained in the *Śabdacandrikā* to lexica like the *Śabdārṇava*.³²⁷

The *Śabdacandrikā* has been used as a source in the *Śabdakalpadruma*, *Vācaspatya*, and *Vaidyakaśabdasiṃdhū*.

Medicinal plants added to those mentioned in the *Amarakoṣa* are: akheḍa (1.321cd), arkamūlā (1.316ab), aśvaśākhota (1.18ab),³²⁸ bhaṅgā (1.260ab and 3.25cd),³²⁹ bhavya (1.14cd),³³⁰ bhūmicampaka (1.87ab),³³¹ dhananḍa (1.16cd),³³² dugdhapucchī (1.320cd), gaṇḍagātra (1.14ab),³³³ ghr̥tamaṇḍā (1.315cd), gr̥ṣma-sundaraka (1.246cd),³³⁴ hastiśuṇḍā (1.98ab),³³⁵ jīvala (1.16cd),³³⁶ kaṅkālī (1.317ab),³³⁷ keśadhārīṇī (1.323ab), khadgakoṣa (1.324cd), kṛṣṇakhadira (1.65cd), kṣudrajīra (1.314cd), kukkura (1.323cd),³³⁸ kurumba (1.13ab),³³⁹ laṅkāsthāyī (1.324ab), lavanī (1.14ab),³⁴⁰ limpāka (1.12cd),³⁴¹ madhukarkaṭikā (1.12cd),³⁴² mahākāṇṭakinī (1.322cd),³⁴³ mahādrda (1.15ab),³⁴⁴ paruṣa (1.14cd),³⁴⁵ raktakhadira (1.65cd), rāmadūtī (1.312),³⁴⁶ sarpākṣī (1.317cd),³⁴⁷ śītalī (1.314ab), śrgālakāṇṭaka (1.247cd),³⁴⁸ śuklāguru (1.214ab), sumadra (1.15ab), śvasuta (1.247cd), trikaṇṭa (1.322ab),³⁴⁹ vāmana (1.316cd), and veśādāla (1.319cd).

Some synonyms in Cakrapāṇidatta's work are sanskritized forms of vernacular names, e.g., cakrakulyā,³⁵⁰ helañcī,³⁵¹ kucikā,³⁵² and vāvala.³⁵³ A few terms are of Persian origin, for example rogana³⁵⁴ and vāṅgana.³⁵⁵

Some series of synonyms show that Cakrapāṇidatta's identifications of a number of medicinal plants deviate from those of other medical lexica. Some of the names of prasāraṇī (1.279) prove that he had the plant *Paederia foetida* Linn. in mind;³⁵⁶ śrī-hastinī, often regarded as a synonym of kurūṇṭikā,³⁵⁷ is regarded as identical with hasti-śuṇḍā.³⁵⁸ Confusion is created in some cases by mentioning one and the same name for different plants: pr̥ṣṇipāṇī is, for example, the name of a particular plant (1.140–142), as well as a synonym of śālaparṇī (1.188cd–189ab).

The Cakrapāṇidatta who wrote the *Śabdacandrikā*³⁵⁹ cannot be the same as the author of the *Cakradatta*, *Āyurvedadīpikā*, etc., since the *Śabdacandrikā* describes bhaṅgā³⁶⁰ and many other plants unknown to him. The *Śabdacandrikā* is also acquainted with the difference between the fruits called bhavya and karmaraṅga,³⁶¹ and with those called gaṇḍagātra and lavanī; the latter two are not indigenous and were introduced into India from South America.

The inclusion of bloodletting among the procedures called pañcakarman (8.2cd–3ab) also speaks against an early date of the work. The same applies to synonyms like sukhānā and khīlānā for cullī (a fireplace; 8.8). Moreover, it is more than unlikely that an author like the earlier Cakrapāṇidatta, well versed in āyurveda, would base one of his works on Amarasiṃha's lexicon.

The materia medica of the *Śabdacandrikā* proves that the work has been written after the introduction of *Annona* species into India, i.e., after the advent of the Portuguese.

CAKRAPĀṆIMĪŚRA: Viśvavallabha.³⁶²

CAMATKĀRA: Vaidyaprakāracamatkārasāyana.³⁶³

CHOYI VAIDYAR of Pāloḷī: *Cikitsāpraveśaka*.³⁶⁴

CIDGHANĀNANDANĀTHA: *Satkarmasaṃgraha*.³⁶⁵ The work begins with a maṅgala addressed to Ādinātha, who created the mahākālayaśāstra; an introductory verse praises the author's guru, Gaganānandanātha. The treatise is said to deal with the curing of diseases by means of yogic practices, helped by medicines. At the end of the work a dhvajabasti is described, employed in the treatment of āsmaṛī and mūtrakṣchra.

Sources mentioned are the works of Gorakṣa and other Mahāsiddhas and Nāthas.³⁶⁶

The *Satkarmasaṃgraha* shows the influence of Śrīnivāsabhāṭṭa's *Haṭharatnāvalī*.³⁶⁷

CIKKAṆAPAṆḌITA: *Vaidyanighaṇṭusāra*.³⁶⁸

DAKṢA, son of Bāṇāra: *Yogasāra*.³⁶⁹

DAKṢARŪPA: *Pathyāpathyavidhi*.³⁷⁰

DĀMODARA: *Bhīmaavinoda*.³⁷¹ According to P. Cordier, this treatise, also called *Bhīmasenavinoda*, consists of two parts, a cikitsākhanda of fifty-four and an uttarakhaṇḍa of two chapters; karmavipākā and Tantric elements abound in its therapeutics, which make it resemble the *Vīrasīṃhāvaloka*.³⁷² P.V. Sharma added to this description that it is an extensive work, later in date than the *Bhāvaprakāśa*, since phiraṅgaroga and rasakarpūra are mentioned in it.³⁷³

DĀMODARA(MIŚRA): *Hari vandanasaṃgraha*.³⁷⁴

DĀMODARA: *Rāmabāṇa*.³⁷⁵

DĀMODARA: *Yogarātnaśekhara*.³⁷⁶

DĀMODARABHĀṬṬA CITTAPĀVANA, son of Raghunātha and Jānakī: *Āyurvedasaṃgraha*.³⁷⁷

DĀNADĀSA: *Āryaphatahadeśabhiṣagdānadāsavaidyakācāra*. This treatise, preserved in the Tibetan Tanjur under the title of *Hhags-yul pha-ta-haḥi sman-pa Da-na-da-saḥi sman-bcos-rnams*, and attributed to the Indian physician Dānadāsa from the country called Phataha, is a short formulary. It contains a number of magical squares and mentions opium.³⁷⁸

DATTASŪRI: *Parahitasiddhānta*.³⁷⁹

DĀŪJĪ: *Vaidyaka(kośa)*.³⁸⁰

DAULATAKHĀN, son of Aliphkhān: *Daulatavinodasārasaṃgraha*.³⁸¹

DAYĀRĀMA: *Ārogyamālā*.³⁸²

DAYĀRĀMA: *Dayāvilāsa*.³⁸³

DAYĀŚAMKARA: *Cikitsākalikā*.³⁸⁴

DEVADĀSA, son of Devadatta and Nāgamā: *Cikitsāmr̥tasāgara* or *Karmavipākacikitsāmr̥tasāgara*, a large compilation, arranged in more than seventy chapters (*taraṅga*); the diseases and their treatment are discussed from a medical, religious, and astrological point of view; the author has extensively drawn upon the *Ātreyaśaṃhitā*, *Mādhavanidāna*, *Madhukośa*, and *Śārṅgadharasamhitā*.³⁸⁵

DEVĪCANDRAVYĀSA: *Paṭṭiprakāśa*.³⁸⁶

DEVĪDATTA: *Vaidyaratnāvalī*.³⁸⁷

DHANAÑJAYA: *Tailāntatāilānirmāṇavidhi*.³⁸⁸

DHANVANTARI: *Vaidyabhāskarodaya*.³⁸⁹

DHANVANTARIKARA: *Āyurvedasārāvalī*, a comprehensive medical work that appears to be a modern compilation. The author, a Vaidya by caste, hailed from East Bengal.³⁹⁰

DHARAÑIDHARAVYĀSA: *Dravyaguṇasārasarvasva*.³⁹¹

DHĪRAJARĀJA: *Cikitsāsāra*.³⁹²

DHUNḌHIRĀJA(KAVI): *Añjanavyākhyā*(?).³⁹³

GAHANANĀTHA: *Yogarātnākara*.³⁹⁴

GAṆAPATIVYĀSA, son of Mahīdharavyāsa: *Yoga(sāra)samuccaya* or *Vaidyakaśāstra-sārasaṃgraha*,³⁹⁵ a work in seven chapters: *rasavīryādhikāra*, *dhātuvīryaśodhanamāraṇa*, *saṃnipātātṛmīcikitsā*, *atisārādicikitsā*, *mūtrakṛcchradicikitsā*, *śvāsādicikitsā*, and *kuṣṭhādicikitsā*.³⁹⁶

Vyāsaṇapati's *Yogasamuccaya* is one of the sources of the *Rasayogasāgara*.

GANDHE UPĀDHYĀYA: *Cikitsābhidhāna* or *Cikitsāvidhāna*.³⁹⁷

GAṆEŚABHIJ: ³⁹⁸ (1) *Arthaprakāśikā*, a commentary on the *Mādhavanidāna*;³⁹⁹ (2) *Cikitsāmr̥ta*;⁴⁰⁰ (3) *Sārarātnāvalī*;⁴⁰¹ (4) *Yogacintāmaṇi*.⁴⁰²

GAṆEŚABHIJ, son of Hari(nātha) Bhaṭṭa of Dvārakā, and grandson of Śrī Kṛṣṇa of Śrīvatsagotra:⁴⁰³ (1) *Śabdāmālā*;⁴⁰⁴ (2) *Sārasaṃgraha*.⁴⁰⁵

GAṆEŚADĀSA: *Dravyādarśa*.⁴⁰⁶

GAṆGĀDHARA, son of Candanārya: *Bheṣajakaḥpa*.⁴⁰⁷ This work was translated into Telugu by Cilkmarṇi Venkaṭācārya, who lived in the middle of the sixteenth century.⁴⁰⁸

GAṆGĀDHARA, or Joṣī Vaidya Bāpū Gaṅgādhara: *Nighaṇṭuprakāśa*, a probably modern, alphabetically arranged dispensary.⁴⁰⁹

GAṆGĀDHARA, son of Dāsa: *Yogarātnāvalī*, in twelve chapters, on materia medica, the therapy of various diseases, and metallic preparations.⁴¹⁰ The titles of the chapters are: (1) *rasādiguṇavarṇana*; (2) *auśadhīnām guṇavarṇanam*; (3) *rasadhātumiśragu-*

ṇavarṇana; (4) rasarājaśodhana; (5) dhātuśodhana; (6) rogānāṃ cikitsāvidhiḥ; (7) atisā-rādīnāṃ vidhiḥ; (8) rogarājādi; (9) kuṣṭhādividhi; (10) pramehādividhi; (11) vājīkara-ṇa; (12) kaṣāyauśadhīnāṃ yogādi.⁴¹¹

GAṄGĀDHARA: *Yogasāra*.⁴¹²

GAṄGĀRĀMA: *Rājayogaratnākara*.⁴¹³

GAṄGĀRĀMA: *(Śadyoga)ratnāvalī*.⁴¹⁴

GAṄGĀRĀMADĀSA, pupil of Bhavānīdāsa Kavirāja: *Śārtraviniścayādhikāra*,⁴¹⁵ a work on the management of females during pregnancy.⁴¹⁶

GAṄGĀSARAṆA CATURVEDIN of Bharohiya: *(Brhja)jadīprakāśa*, probably a modern work.⁴¹⁷

GAṄGEŚA or VAIDYAVILOKANA: *Gaṅgeśavallabha*.⁴¹⁸

GHANAŚYĀMASŪRI: *Guṇacandrikā*.⁴¹⁹

GĪRVĀṆAYUDDHAVIKRAMA, son of Raṇabahādūra: *Vājirahasyaśataka*.⁴²⁰

GOKULANĀTHA: *Vaidyādarśa*.⁴²¹

GOMMAṬA is regarded as the author of the *Merutantra* and, probably, a *Vaidyasam-graha*.⁴²² The *Merutantra*⁴²³ is sometimes regarded as a medical work.⁴²⁴

Pūjyapāda is mentioned with reverence in Gommaṭa's *Merutantra*.

The *Merutantra* is quoted in the commentary on the *Siddhabheṣajamaṇimālā*. It is referred to in the *Dattātreyaśāstra* and Nāgārjuna's *Kakṣapūṭa*, and was one of the sources of Basava's *Śivatattvaratnākara*.

GOPĀLADĀSA: (1) *Cikitsākramakalpavallī*;⁴²⁵ (2) *Cikitsāsāra*;⁴²⁶ (3) *Gopālavinoda*;⁴²⁷ (4) *Vaidya(sāra)saṃgraha*.⁴²⁸

GOPĀLADĀSA, son of Balabhadra: *Vaidyavilāsa*.⁴²⁹

GOPĀNANDA, son of Padmānandamiśra: *Vaṭakaśataka*.⁴³⁰

GOPINĀTHA: *Strīcikitsāpaddhati*.⁴³¹

GOVARDHANA: *Vaidyakagrantha*.⁴³²

GOVARDHANA(NĀTHA): *(Nighaṇṭu)nāmāvalī*.⁴³³

GOVARDHANAVĀIDYA: (1) *Cikitsāśāstra*; (2) *Rogapradīpa*.⁴³⁴

GOVINDA, son of Keśava: *Karṣādīpramāṇa*, a work on measures and weights used in medicine.⁴³⁵

GOVINDA: *Lokopakāraka*.⁴³⁶

GOVINDA: *Sārasamuccaya*.⁴³⁷

GOVINDADĀSA: *Govindadāsotsava*.⁴³⁸

GOVINDADEVA: *Yogoktililāvatī* or *Aṣṭāṅgaḥṛdaya(saṃhitā)*.⁴³⁹

GOVINDAMIŚRA: *Govindaprakāśa*.⁴⁴⁰

GOVINDARĀJA (KAVIRĀJA), son of Divākara paṇḍita: *Camatkāracintāmaṇi*.⁴⁴¹
 GOVINDARĀMA TRIPĀṬHIN: *Bhāvaprakāśa*.⁴⁴²

GOVINDASENA's *Paribhāṣāpradīpa*⁴⁴³ is a compilatory work on rules, definitions and technical terms (*paribhāṣā*), pertaining to the preparation of medicines and related issues.

The treatise consists of 615 verses, arranged in four chapters (*khaṇḍa*).

The subjects of chapter one (131 verses) are: introduction (1–6); weights and measures according to the *kāliṅga* (10–28) and *māgadha* (30–45) systems; rules about doubling the prescribed quantity if fresh drugs are used (46–52); the storage life of drugs (53–57); suitable and unsuitable places for the collection of fresh drugs (59–64); ritual prescriptions concerning their collection (65–68); parts of plants suitable to medicinal use (69–73); the appropriate seasons for the collection of particular plant parts (75–76); rules to be applied when particular details are wanting in the texts (77–87); substitutes for drugs which are not available (88–131).

Chapter two (77 verses) deals with the five types of *kaṣāya* (1–4): *svarasa* (5–16), *kalka* (17–19), *kvātha* (20–24), *śīta* (25–27), and *phāṇṭa* (28–30); types of pills (31–33); dosages and ratios of ingredients (34–57); the preparation of a *yavagū*, *maṇḍa*, *peyā*, *bhakta* (58–67); the preparation of *māṃsarasa* and *lākṣārasa* (68–70); the *prakṣepa*, and related subjects (71–77).

Chapter three (197 verses) is concerned with *snehapāka* (1–51); *guggulupāka* (52–56); the processing of metals (*lohapāka*; 57–78); *bhāvanā* (79–81); some subjects connected with *pāka* (82–86); *anupāna* (87–107); dosages in children (108–114); suitable times for taking a medicine (115–137); generalities about therapeutic measures (138–145); groups of medicinal substances (146–165); characterizations of a number of substances, such as *veśavāra*, *śukta*, *tuṣāmbu*, etc. (166–197).

Chapter four (210 verses) gives an account of *pañcakarman* and some related topics: introductory matter (1–5); *vamana* (6–34); *virecana* (35–60); *nasya* (61–79); *anuvāsana* (80–116); *nirūha* (117–142); *uttarabasti* (143–161); *dhūmapāna* (162–174); *kavala* and *gaṇḍūṣa* (175–186); *raktamokṣaṇa* (187–192); *murchana* (193–201);⁴⁴⁴ fragrant substances (*gandhadravya*; 202–210).

Authorities mentioned in the text are *Kāśirāja* (1.84) and *Patañjali* (3.63).

Sources from which the author borrowed verses are: *Amoghatantra* (3.74–77),⁴⁴⁵ *Ānandasena* (4.48 and 160–161),⁴⁴⁶ *Caraka* (3.139 and 187; 4.7), *Cikitsāmrta* (4.132–133),⁴⁴⁷ *granthāntara* (3.81; 4.31, 88, 89–92), *Keśarīṭīkākāra* (2.57),⁴⁴⁸ *Patañjali* (3.67–70),⁴⁴⁹ *Śārṅgadhara* (1.8, 49, 58, 70; 2.20–21; 3.25; 4.35, 121–131, 143–159, 175–182),⁴⁵⁰ *Trivikrama's Lohapradīpa* (3.57–64),⁴⁵¹ *Vāgbhaṭa* (4.150–151), and *Viśvāmītra* (2.3).

The *Paribhāṣāpradīpa* is quoted in *Āsubodha* and *Nityabodha* Senagupta's commentary on the *Rasaratnasamuccaya* (8.1; 10.75).

Authorities and works quoted or referred to in the comments added to the text⁴⁵² are: *Cakra* (2.72), *Cakradatta* (2.72), *Cakradatta's Svasaṃgraha* (2.39 and 71), *Cakrapāṇidatta* (2.57 and 71), *Cakrapāṇīkṛtasamgraha* (3.18–23), *Caraka* (2.39), *Dṛḍhabala* (4.119–120), *guraḥ* (1.72–73; 2.31–33, 39, 52–53, 57, 72, 74, 76–77),

Kāśirāja (1.81–82 and 84), Maheśvara's *Cakraśeṣaṭīkā* (3.33),⁴⁵³ Nārāyaṇadāsa (2.57),⁴⁵⁴ Nārāyaṇāntaraṅga (2.57),⁴⁵⁵ Niścalakara (1.46; 2.57; 3.18–23), Patañjali's *Lauhaśāstra* (3.24), Śāringadhara (2.57), Suśruta (2.39; 3.99; 4.117), Trivikrama (2.31–33), Vāgbhaṭa (4.117), and Yaśodharavyākhyāna (3.1–4).⁴⁵⁶ Many quotations are from an unspecified source.

Āśubodha Vidyābhūṣaṇa Bhaṭṭācārya, one of the sons of Jīvananda Vidyāsāgara, wrote a commentary on the *Paribhāṣāpradīpa*, which mentions a large number of variants of the text.

Āśubodha's commentary quotes from or refers to: Āḍhamalla (1.10–25), Amara (1.7 and 112), Cakra (4.67), Cakradatta (2.71), Cakrapāṇi (1.98), *Cakrasaṅgraha* (1.95; 3.178; 4.77, 80–81, 176–177), Caraka, Ṛḍhabala (3.4), Gaṅgādhara (3.4, 23–24, 27–30), Kaiyaṭa (1.2–3), Kātyāyana (1.4–5), Kharanāda (4.48), *Lauhapradīpa* (3.57–64), Patañjali (3.67–69), Rājavallabha (2.95), Śāringadhara (1.10–25; 3.25–26; 4.181), Śivādāsa and his *Cakraṭīkā* (1.95 and 98; 2.58, 61, 71; 3.74–78 and 115–127; 4.53), Śrīkānta (1.10–25),⁴⁵⁷ Suśruta, *Taittirīyopaniṣad* (3.23–24), and Vāgbhaṭa (3.108–111; 4.189).

The author mentions his name, Govindasena, son of Kṛṣṇavallabhasena, in one of the introductory verses (1.2). His date cannot accurately be determined. Govindasena is later than Śāringadhara, Nārāyaṇadāsa, and Trivikrama, quoted by him, which means that he lived after the end of the fourteenth century, and earlier than A.D. 1873, the year of the first edition of his treatise.

GOVINDASĪNU: *Samnīpātamañjarī*.⁴⁵⁸

GOVINDA VĀPAṬA: *Samnīpātamañjarī*.⁴⁵⁹

GURUDATTASIMHA: *Yogaratanāvalī*.⁴⁶⁰

HARĀNANDADĀSA KAVICANDRA: *Cikitsāsāradīpikā*.⁴⁶¹

HARAPĀLA: *Vaidyaśāstra*.⁴⁶²

HARARĀMA: *Cikitsāsāra*.⁴⁶³

HARIBHĀRATĪ: *Cikitsāsāra*.⁴⁶⁴

HARICARANASENA was the author of the *Paryāyamuktāvalī*.⁴⁶⁵

This work is based on Mādhava's *Ratnamālā*,⁴⁶⁶ but the author rearranged its subject matter in a number of homogeneous sections, adding much that is new and omitting everything not connected with medicine.

The treatise contains 1,247 arthaśloka, arranged in the following twenty-three vargas: sugandhi-, madhyagandha-, hīnagandha-, sārāja-, ratna-, dhātūpadhātu-, madhura-, amla-, uttamaśāka-, tiktaśāka-, puṣpa-, latāphala-, kanda-, mahāvṛkṣa-, madhyamavṛkṣa-, hrasvavṛkṣa-, latā-, śimbīśūkadhānya-, ṛṇadhānya-, bhaktādikṛtānna-, pāñīya-, āvaśyaka-, and bhautikādivarga.⁴⁶⁷ This arrangement, which is rather new and original, finds a parallel only in Hemacandra's *Nighaṇṭuseṣa*, by which it may have been influenced, and in Gopīmohana's *Paryāyamuktāvalī*.

After enumerating the items of a particular varga, the author gives synonyms of each of them, to which the vernacular equivalent is usually added.⁴⁶⁸ The homonymous section of the *Paryāyamuktāvalī* is much less developed than its synonymous

counterpart and covers only ardhśloka 206–279 of the bhautikādivarga.

Remarkable words are: kuliñja (2.32), ahiphena (6.49), kākendu (7.31), and jayapāla (15.15).

No particulars are known on the author.

Being based on Mādhava's *Ratnamālā*, the *Paryāyamuktāvalī* is later than A.D. 800–1000. Internal evidence establishes that it cannot be earlier than about the thirteenth century: jayapāla is mentioned for the first time in the *Mādhavadravyaguṇa*, ahiphena and kuliñjana are found in Soḍhala's *Gadanigraha*,⁴⁶⁹ and kākendu occurs in the *Dhanvantarinighaṇṭu*.⁴⁷⁰ A lower limit cannot be determined by reason of the absence of quotations from the *Paryāyamuktāvalī* by later authors.

HARIHARA: *Vaidyavallabha*.⁴⁷¹

HARIHARA NANDA: *Āyurvedasārasaṃgraha*.⁴⁷²

HARI KAVI, pupil of Vajrasena: *Karpūraprakaraṇa*.⁴⁷³

HARIPĀLA: *Yogacintāmaṇi*.⁴⁷⁴

HARIPĀLADEVA: *Yoganibandha*.⁴⁷⁵

HARIRĀYAŚARMA is the author of the *Haridhāritagrantha*.⁴⁷⁶

This treatise consists of about 190 verses⁴⁷⁷ and is divided into six chapters, which contain recipes, mostly of an āyurvedic type; the section on fevers of chapter one presents a number of rasayogas. A clear order in the arrangement of the diseases is absent, with the exception of chapter one, which deals with fever, diarrhoea, and grahaṇī, and the last chapter, which is mainly concerned with gynaecology, venereal diseases, and aphrodisiacs.

Some noteworthy disorders mentioned are: rasaśeṣajvara (7), pittodreka (30), pittadāha (30), mukhakīla (facial warts; 33), and kakṣādaurgandhya (foul-smelling armpits; 43). The work ends with a description of the purification of jayapāla.⁴⁷⁸

Noticeable among the substances prescribed are akarkara (41), mājūphala (10), and mastakī (10). Sources are not referred to.

The author calls himself Hariśarma in the maṅgalācaraṇa; his name is Harirāyaśarma in the colophons.⁴⁷⁹

The contents of the work warrant the conclusion that it cannot be earlier than the thirteenth century, but it may have been compiled a number of centuries later.⁴⁸⁰

HARIŚARANASENA, son of Gadādhara Mahāseṇa Pātra: *Dravyaguṇākara* or *Satkaṇṭharatna*.⁴⁸¹

HARIṢEṆAṆḌITA: *Jagatsundarīyogamālā*.⁴⁸²

HEMACANDRA, pupil of Devacandra: *Gadanigrahagrantha*.⁴⁸³

HEMAVIJAYA GAṆI: *Kastūrīprakaraṇa*.⁴⁸⁴

HERAMBASENA SAHAPATNĪ, son of Śubhasena, compiled the *Gūḍhabodhakasaṃgraha*, a work on the aetiology, symptomatology, and treatment of diseases. After a respectful salutation to Cakrapāṇi, Maheśvara, Mādhava and Nityanātha, the

author states that his treatise is based on the *Rasaratnākara* (of Nityanātha), the *Cakra(datta)*,⁴⁸⁵ and (the work of) Maheśvara, which implies that Herambasena cannot be earlier than Nityanātha.⁴⁸⁶

INDRADEVA: *Nāmasāgara*.⁴⁸⁷

ĪŚĀNACANDRA VIŚĀRADA: *Bhaiṣajyavijñāna*.⁴⁸⁸

ĪŚVARA: *Kalpāṇava*.⁴⁸⁹

JAGANNĀTHADATTA: *Cikitsāratna*.⁴⁹⁰

JAGANNĀTHAPRASĀDA ŚUKLA: *Anupānakalpataru*.⁴⁹¹

JANĀRDANA:⁴⁹² (1) *Mūtraparīkṣā*;⁴⁹³ (2) *Sadvaidyakaustubha*.⁴⁹⁴

JARARA: *Jvaraparājaya*.⁴⁹⁵

JAYADEVA: *Jvaraparājaya*.⁴⁹⁶

JAYADEVA: *Kvāthacikitsā*.⁴⁹⁷

JAYADEVASVĀMIN: *Vaidyāmṛta*.⁴⁹⁸

JAYAKṚṢṆADĀSA, son of Verikatadāsa: *Cikitsāratna*.⁴⁹⁹

JAYAPĀLADĪKṢITA: *Madhukośa*.⁵⁰⁰

JAYARĀMA: *Cikitsāratnasamgraha*, a compilation from works on therapy.⁵⁰¹

JAYARĀMAGIRI or JAIRĀMAGIRI, pupil of Caitanyagiri: *Kalpadrumasārasamgraha*, a work in a mixture of Sanskrit and Hindī.⁵⁰²

JAYARĀMAMIŚRA or JAIRĀMAMIŚRA: *Ānandārṇava*.⁵⁰³

JĪVARĀJA: *Samnipātacikitsā*.⁵⁰⁴

JÑĀNAVAIRA: *Guhyāgnicakra*. This Tibetan demonological treatise of Tantric inspiration, translated from the Sanskrit and forming part of the Tanjur, mentions Revatī and other malevolent beings.⁵⁰⁵

KADAMBA: *Vaidyakadamba*.⁵⁰⁶

KADAMBEŚVARA: *Kautukacintāmaṇi*.⁵⁰⁷

KĀLĪCARAṆADATTA: *Cikitsāsārasamgraha*.⁵⁰⁸

KĀLĪPRAŚĀDA VAIDYA: *Sārasamgraha*.⁵⁰⁹

KALPARĀMA: *Bālatantra*.⁵¹⁰

KĀMADEVA: *Vaidyakalpadruma*.⁵¹¹

KAMALĀKṢA KAVIRĀJA of the Roṣa family: *Cikitsātattvacandrikā*.⁵¹²

KĀMEŚVARA, son of Narendra (or Narahara Gauḍadyumaṇi), brother of Viśveśa Vidyānidhi, of the Puruṣottama family and of Gauḍadeśa: *Āyurvedasiddhāntasambodhinī*, a work in two chapters (vṛtti), the first of which treats of several matters, especially dietetics, and the second of diseases and their treatment.⁵¹³

KANAKADATTAVAIDYA: *Tailārṇava*.⁵¹⁴

KANAKAPURAPADMAPANḌITA: *Cikitsāsthāna*.⁵¹⁵

KĀNHA, son of Vastupāla: *Cikitsāratnabhūṣaṇa*.⁵¹⁶

KĀŚĪNĀTHA. Several works are ascribed to one or more authors of this name:⁵¹⁷ (1) *Bālabodhodaya* by Kāśīnātha Caturvedin;⁵¹⁸ (2) *Cikitsādhātusāra* by Kāśīnātha Dvivedin;⁵¹⁹ (3) *Cikitsākramakalpavallī* by Kāśīnātha Caturvedin;⁵²⁰ (4) *Rasakalpalatā*;⁵²¹ (5) *Viṣoddhāra*.⁵²²

The *Cikitsākramakalpavallī* is one of the sources of the *Rasayogasāgara*;⁵²³ it is quoted in Hariśaraṇānanda's *Kūṭīpakvarasanirmāṇavijñāna*.

KĀŚĪRĀMA: *Vaidyasarvasva*.⁵²⁴

KAVĪNDRA Candra: *Ratnāvalī*.⁵²⁵

KAVIŚEKHARA: *Prasūtikaraṇa* or *Strīcikitsā*.⁵²⁶

KAVISENA: *Gudaroga*.⁵²⁷

KEDĀRANĀTHA HAḌA: *Sadvaidyasadbhāvaviveka*.⁵²⁸

KENDRADEVA: *Nāmasāgara*.⁵²⁹

KEŚAVA was the author of the *Harigūpa*, a short medical treatise in five chapters: (1) *kāyacikitsā*, *pañcakarma*, and *śalya* (184 verses); (2) *śālākya* (30 verses); (3) *viṣa* and *strīroga* (13 verses); (4) *rasāyana* (7 verses); (5) *vājīkaraṇa* (10 verses). The arrangement of the diseases disagrees with the *Mādhavanidāna*.⁵³⁰

Keśava was the son of Vatsa and Koḷambā; Vatsa's father was the physician Vidyādhara, the son of Bhrātara and the grandson of Nāganātha.

KEŚAVABHAṬṬA: *Laghunighaṇṭusāra*.⁵³¹

KONḌĀVADHĀNI: *Bāhataśāstra*.⁵³²

KRṢṢṢA: *Cikitsātattva*.⁵³³

KRṢṢṢA: *Dravyagūṇaratnākara*.⁵³⁴

KRṢṢṢADĀSA: *Dīpikākeraḷa*.⁵³⁵

KRṢṢṢAMIŚRA: *Sukhānandavinoda*.⁵³⁶

KRṢṢṢĀNANDA KAVIRĀJA: *Cikitsāsāṃgraha*.⁵³⁷

KRṢṢṢNĀTHAKAVIRĀJA: *Cikitsāsāṃgraha*.⁵³⁸

KRṢṢṢAPĀDA: *Pūtikātailanirmāṇavidhi*.⁵³⁹

KṢEMAJAYA: *Prabodhacandrodaya*.⁵⁴⁰

KṢEMAṆKARA MIŚRA: *Cikitsāsāra*, a work in seventy-eight chapters (*adhyāya*).⁵⁴¹

KṢEMAŚAMKARAMIŚRA: *Cikitsāsāra*.⁵⁴²

KṢEMAŚARMĀCĀRYA, son of Gautama: *Cikitsāsārasāṃgraha*, in about 900 verses.⁵⁴³

KULAKĪRTI: *Añjanadīpikā*.⁵⁴⁴

LABDHICANDRA: *Bṛhallālacandrikā*.⁵⁴⁵

LAKṢMAṆAKAVI: *Kāśyapatantra*.⁵⁴⁶

LAKṢMĪDHARA: *Nidāna*.⁵⁴⁷

LAKṢMĪDHARĀCĀRYA: *Karṇārṇava*.⁵⁴⁸

LAKṢMĪNĀRĀYAṆA: *Gudavadanavivaraparīkṣāpañcaka*.⁵⁴⁹

LAKṢMĪNĀRĀYAṆA: *Viṣopacāra*.⁵⁵⁰

LAKṢMĪNĀTHA: *Laṅghanapathyanirṇaya*.⁵⁵¹

MĀDHAVA: *Prayogacintāmaṇi*.⁵⁵²

MĀDHAVA: *Tantrasāra*, a collection of aphorisms on the causes of maladies.⁵⁵³

BHIṢAJ MĀDHAVA was the author of the *Kūṭamudgara*.⁵⁵⁴ This work⁵⁵⁵ is a very short treatise in twenty-one verses, which are, due to their compactness, difficult to interpret. It is accompanied by an auto-commentary.⁵⁵⁶

The work deals with the six tastes and their relationships with the doṣas (1–4), the doṣas in connection with the parts of day and night (5) and the stages of the digestive process (6), the bodily seats of the doṣas (7), and their association with the two halves of the year (8). After rules about the drinking of water in general and that from rivers in particular (9), the characteristics of incurable diseases are enumerated (10), followed by those of the sixty-two types of saṃnipāta (11–14) and the five mahābhūtas (15); the next subjects consist of the treatment of vṛṇas (16), and the properties of harītakī, along with rules about its use (17–18). The tract ends with two verses on its qualities and one about its author.

Most of the verses of the *Kūṭamudgara* seem to be original, though verse sixteen is a quotation from the *Suśrutasaṃhitā*.⁵⁵⁷

The work is quoted in the *Āyurvedasaṃgraha* of Devendranātha and Upendranātha Senagupta.

No particulars are known on the author.

The work was written before the middle of the eighteenth century, because one of the MSS dates from A.D. 1747/48.⁵⁵⁸

MĀDHAVA KAVIRĀJA of Nārītagrāma: *Mugdhabodha*,⁵⁵⁹ a compilation from earlier works on the treatment of various disorders. It ends with a list of twenty-two authorities, among which the following may be mentioned: Bhāskara, Candranātha, Caraka, Gahananātha, Mahāsenā, Maheśvara, Nidāna, Pātāñjala, Ratnāvalī, Sārakamudī, Suśruta, Tantra, Tantranātha, Vābhāṭa, Vaidyasāgara, and Vṛddhavāgbhaṭa.⁵⁶⁰

The *Mugdhabodha* is probably later than Vaidyarāja's *Sukhabodha*,⁵⁶¹ because it partly agrees with the latter.⁵⁶²

MĀDHAVA PAṆḌITA: *Gadāsaṃjīvanī*.⁵⁶³ The introductory stanzas of one of the MSS⁵⁶⁴ enumerate the following subjects: (1) roganidāna, (2) ..., ⁵⁶⁵ (3) auśadhakalpa, (4) mūlikākālpa, (5) raktamokṣaṇa, (6) agnirakṣākarmaṇ, (7) śastrakarmaṇ, and (8) mantra. Topics dealt with in another MS⁵⁶⁶ are: sarvaroganidāna, nāḍīnidāna, doṣatraya, aśtīvātānidāna, paityaroganidāna, śleṣmaroganidāna, jvaranidāna, kṣayaroganidāna, grahiṇīnidāna, mehanidāna, and viṣūcyajīrṇanidāna.

The *Gadāsaṃjīvanī* is quoted in a work called *Nāḍivijñāna*.⁵⁶⁷

The author, of Śrīvatsagotra and Āpastambasūtra,⁵⁶⁸ was a son of the poet and physician Tuḷlūru Śarabharāju. He completed his father's medical treatise, the *Śarabharājīyam*. Mādhava Paṇḍita, who was called vaidyavidyātrineta, may have lived in the seventeenth century.⁵⁶⁹

MĀDHAVĀCĀRYA: *Cikitsāratnasamgraha* or *Cikitsākālpapādapa*.⁵⁷⁰

MĀDHAVĀCĀRYA SALĀDU: *Cikitsāsārasamgraha*, also called *Tribhuvanatilaka*.⁵⁷¹

MADHU: *Dravyagūṇaratnamālīkā*.⁵⁷²

MĀGACANDRADEVA: *Māgarājapaddhati*, a work covering all the fields of medicine, including charms.

In a long introduction the author gives a detailed genealogy. He is a kṣatriya of Kauśalyagotra⁵⁷³ and a descendant of Rāma. His forefathers are Sahagala, Sāhana, Dharma, Marigaṭa, Abhaṭa, Saṃbhava, Manorā, Kajjala, Vaccharāja, Mahārāja, Gāgū, and Nāthūdeva. The three sons of Nāthūdeva were Tripuradāsa, Rūpacandra, and Māgadeva (= Māgacandraeva). Tripuradāsa had two sons, Kundā and Nicandā. Rūpacandra's three sons were Kālidāsa, Haridāsa, and Jevidāsa. Māgadeva's two sons were called Durgādāsa and Bhojarāja.

Sources mentioned in the introduction are Caraka, Hārīta, Suśruta, Tīṣaṭa, Vāgbhaṭa, and Vaṅga(sena).⁵⁷⁴

The family to which Māgacandra belonged ruled at Sādhāraṇapura, a city identified as Sahāranpur in Uttar Pradesh by D.C. Sircar. This author claims that Sahagala or Sahigila is no other than the Panjabi family name Saigal. He connects this name with Hindī saikalgar (a polisher of metal arms and tools), which is the name of a minor caste found in the Sahāranpur region.⁵⁷⁵

The town of Sahāranpur was founded about A.D. 1340, in the reign of Muḥammad bin Tughluq (A.D. 1325–1351). Māgacandra does not appear to have flourished earlier than the fifteenth or sixteenth century.⁵⁷⁶

MAHĀDEVA: *Mahārasāyanavidhi*, taken from the *Kākacāṇḍeśvarīmata* or some other Tantra.⁵⁷⁷

MAHĀDEVABHĪṢAJ: *Vaidyavinodasāra*.⁵⁷⁸

MAHĀDEVAPAṆḌITA, client of Rājasimha: *Rājasimhasudhāsindhu*.⁵⁷⁹

MAHENDRA: *Dravyāvalīnighaṇṭu*.⁵⁸⁰

MAHENDRA: *Vaidyakasaṅgraha*.⁵⁸¹

MAHENDRA JAINA, son of Kṛṣṇa Vaidya: *Dravyāvalīsamuccaya*.⁵⁸²

MAHEŚA BHAṬṬA: *Cikitsāsāra*.⁵⁸³

MAHEŚACANDRA: (1) *Vaidyakasaṅgraha*,⁵⁸⁴ (2) *Vaidyakasarvasva*.⁵⁸⁵

MAHO: *Cakṣuṣpratyaṅgaṇaḍṣṭikriyā* or *Ācārasmārakanyāsa*,⁵⁸⁶ attributed to the Indian physician Maho⁵⁸⁷ or Manaha.⁵⁸⁸ The Tibetan titles of this short work on the treatment of eye diseases, translated in the Potala by Lhun-grub,⁵⁸⁹ are *Mig-ḥbyed mthoṅ-ba don-lan*⁵⁹⁰ and *Lag-len zin-bris-su bkod*.⁵⁹¹

MALLADEVA: *Kālaṅkāra*.⁵⁹²

MALLĀRIPAṆḌITA, son of Keśavācārya: *Vaidyakalpataru*.⁵⁹³ This is a rasaśāstra work in twenty-one chapters; the *Rasārṇava* is quoted in it.⁵⁹⁴ The same author may have written the *Aśvāyurvedasārasindhu*.⁵⁹⁵

MALLIṢEṆA: *Bālagrahacikitsā*.⁵⁹⁶

MĀNAJĪ, pupil of Sumatimeru: *Āyurvedasārasaṅgraha*.⁵⁹⁷

MAṄGALAGIRI SŪRI, of Gelavaṅgala family and Ātreya gotra, son of Jagannātha, was the author of a work called *Sūtrasthāna*.⁵⁹⁸

Its nine chapters have the following headings: (1) āyurvedasūtrasthāna, (2) rasasūtrābhidhāna, (3) saṃkhyāsāṃkhyeyasūtra, (4) ārogyasūtra, (5) tridoṣasūtra, (6) dhamanīsūtra, (7) viṣapratiṣasūtra, (8) yantrasūtra, and (9) āsuracikitsāsūtra.

Maṅgalagiri also wrote a commentary on Bharadvāja's *Bheṣajakalpa*. A *Rasasūtrābhidhāna*⁵⁹⁹ is sometimes regarded as a commentary on (a portion of) the first chapter of Bharadvāja's *Rasapradīpikā*.

Maṅgalagiri is described as an erudite scholar, well versed in medicine, rasaśāstra, mantraśāstra, etc.⁶⁰⁰

MAṄGARĀJA: *Khagendramanidarpaṇa*.⁶⁰¹ This treatise, arranged in sixteen chapters, written in Kannaḍa, deals with the treatment of various diseases, but is chiefly concerned with snake-bites and poisons in general. Four types of medicinal preparation are prominently present in the work: nasya (an errhine), pāna (a fluid for internal use), lepa (a paste for external application), and añjana (a collyrium). Mantras are repeatedly mentioned.

Authorities referred to are Jina and Pūjyapāda.

The author, also called Maṅga(ṇa) and Maṅkhaṇa, lived in the Hoysala country and wrote his treatise during the reign of Harihara I of Vijayanagar⁶⁰² (about A.D. 1336 to 1356),⁶⁰³ or somewhat later.⁶⁰⁴ His mastery in Kannaḍa and Sanskrit earned him the titles of ubhayakaviśa, kavipadmabhāskara, and sāhityavaidyavidyāmbudhi.

MAṆI: *Yogāñjana*.⁶⁰⁵

MĀNIKYA, son of Padmanābha: (*Samnipāta*)*padacandrikā*, a commentary on the anonymous *Samnipātacandrikā*, a monograph on fevers.⁶⁰⁶

MANIṢIN, son of Haradatta: *Dviśatī*.⁶⁰⁷

MANIVENA: *Bālagrahacikitsā*.⁶⁰⁸

MANU, son of Lakṣmaṇa: *Vaidyasarvasva*, a collection of 117 prescriptions.⁶⁰⁹

MĀRGASAHĀYA: *Bhaiṣajyasāraniḥgaṇṭu*.⁶¹⁰

MATHANASIMHA VAIDYA or VAIDYAMATHANASIMHA: *Trayodaśasaṃnipātānām cikitsā*, a work in fifty-four verses, dealing with the diagnosis and treatment of thirteen saṃnipāta fevers. The names of twelve of these fevers are: sandhiga, antaka, rugdāhaka, cittabhrama, śītāṅga, tandrika, kaṇṭhakubja, hāridraka, bhagnanetra,⁶¹¹ raktaṣṭhīvin, jihvaka, and abhinyāsa. Two additional chapters on saṃnipāta fevers and their treatment occur at the end of the tract: guṭikādhikāra and saṃnipātakalikā.⁶¹²

This text is related to the *Samnipātakalikā* attributed to Dhanvantari and that which forms part of the *Aśvinīkumārasaṃhitā*.⁶¹³

MATHURĀNĀTHA ŚUKLA: *Vaidyāmṛtalahaṛī*.⁶¹⁴

MĀYAṆA: *Bheṣajakalpa*.⁶¹⁵

MUDGALA: *Dravyaratnākara*.⁶¹⁶

MUḌUMBAI RĀGHAVĀCĀRYA, of Śrīvatsagotra: *Cikitsāsārasaṃgraha*.⁶¹⁷

NĀGADEVA: *Paryāyamañjarī*.⁶¹⁸

NAMAḤŚIVĀYA PAṆḌITA, pupil of Pūrṇānanda: *Vaidyapūrvakhaṇḍa*.⁶¹⁹

NANDIKĒŚVARA: *Netraprakāśikā*, a work on eye diseases, in the form of a dialogue between Pūjyapāda as the teacher and Hayagrīva as the pupil.⁶²⁰ The colophon gives the impression that it formed part of a larger work, called *Āyurveda*, composed as a conversation between Umā and Maheśvara.⁶²¹

NAÑJARĀJA BHŪPĀLA: *Vaidyasārasaṃgraha*.⁶²² This work may be the same as the *Vaidyasārasaṃgraha* of Narasiṃhaśāstrin.⁶²³

NĀRADA: *Sphoṭikāvaidya*, a treatise in three chapters, in the form of a dialogue between Āstika and Gautama, on the treatment of sphoṭikās.⁶²⁴

NARASIṂHA: *Guṇasārasamuccaya*.⁶²⁵

NARAVATA(?): *Kāṅkāyanavaṭikā*.⁶²⁶

NĀRĀYAṆA: *Jyotsnikā*.⁶²⁷

NĀRĀYAṆA: *Nārāyaṇavalokana*, a medical work on karmavipākā.⁶²⁸

NĀRĀYAṆA: *Nārāyaṇavaṭīpātha*.⁶²⁹

NĀRĀYAṆA: *Ratnamālādhyāya*, a medical vocabulary.⁶³⁰

The *Tantrasārasaṃgraha*⁶³¹ by NĀRĀYAṆA⁶³² is a Tantric text, also called *Nārāyaṇīya Sarvamantrārthakośa*,⁶³³ that deals with medicine in some of its chapters.⁶³⁴ In Kerala it is known as *Viṣanārāyaṇīya*,⁶³⁵ in order to distinguish it from *Nārāyaṇabhaṭṭatripāda*'s *Nārāyaṇīya*, which is a well-known Bhāgavata work, very popular in that country.⁶³⁶

The treatise contains 2,069 verses, arranged in thirty-two chapters (paṭala).⁶³⁷ It is called a *ṣaṭkārmikatatantṛa*,⁶³⁸ which explains that six Tantric subjects are covered:⁶³⁹ *viṣa*, i.e., toxicology (chapters one to ten), *grahas* and *unmāda* (chapters eleven to fourteen), *āmayadhvaṃsa* and *auśadha*, i.e., the treatment of various diseases (chapters fifteen and sixteen), the types of magic called *kṣudra*⁶⁴⁰ (chapters seventeen and eighteen),⁶⁴¹ the conjuring art called *narman* or *vinoda*, i.e., illusionism (chapter nineteen), and, finally, *kāmika*, i.e., devotion to Tantric deities and its results (chapters twenty to thirty-two).⁶⁴²

The first ten chapters are mainly on animal poisons: (1) introductory matter, (2) the origin of snakes and their typology, (3–5) the treatment of snake-bites with mantras, etc., (6) the medical treatment of the bites of darvikara snakes, (7) the bites of gonasa snakes⁶⁴³ and their treatment, (8) the bites of rājila snakes and their treatment, (9) rat-bites and their treatment, (10) the bites of spiders, scorpions, rabid dogs, etc., together with their treatment, remedial measures against poisons of animal and vegetable origin, and drugs which neutralize other drugs (*pratyaūśadha*).⁶⁴⁴

Chapters eleven to sixteen deal with: (11) *bālagrahas* (three series are mentioned,

attacking the child on the first to tenth day, first to twelfth month, and second to seventeenth year of life),⁶⁴⁵ (12) unmāda, i.e., insanity, caused by bodily disorders or by grahas, (13) measures against disorders caused by grahas, (14) the treatment of unmāda, (15–16) the treatment of various diseases.

Chapters seventeen to twenty-seven are not relevant to medicine. Chapter twenty-eight (vaśyapaṭala) contains various measures which affect the sexual functions of men and women; chapter twenty-nine (strīpaṭala) contains matter pertaining to obstetrics and gynaecology; chapter thirty (gavādīpaṭala) is about diseases in various domestic animals and other subjects; chapter thirty-one (yuddhādīpaṭala) is concerned with aṣṭas and warfare. The concluding chapter (hariharapūjādīpaṭala) is devoid of medical interest.

The author refers to only one of his sources, namely the *Śikhāyoga*.⁶⁴⁶

The *Tantrasārasaṅgraha* is quoted by Anantakumāra⁶⁴⁷ and Īśānaśivagurudeva under the title *Nārāyaṇīya*.⁶⁴⁸ The *Bhesajjamaññūsāsannaya* cites it as *Tantrasārasaṅgraha* and *Nārāyaṇīya*.

Eighteen mahāgrahas are described, together with the symptoms they bring about in their victims: amṛta or sura, asura, nāga, yakṣa, gandharva, rākṣasa, meḍhra, kaśmala,⁶⁴⁹ nistejas,⁶⁵⁰ bhasmaka, pitar, kuśa, vināyaka, pralāpa, piśāca, antyaja, yonija, and bhūta; to these are added nine grahas: apasmāra, dvija, brahmarākṣasa, avanibhuj or nrpa, viś, vṛṣala, nīca, caṇḍāla, and vyantara. The grahas are also divided into the categories balikāma, ratikāma and hantukāma.⁶⁵¹

A disease of the ears, called jhīnikā, is once mentioned (15.58), and also a type of arśas localized on the scalp (kapālārśas, 16.22). The disease called mārī (15.51) is probably the same as masūrīkā (15.52). The commentator explains ślīpada as pādavalīmīka (ad 16.46).

Interesting names of medicinal plants are: ajjhaṭā (8.41; 15.41),⁶⁵² alpamāriṣa (6.54), aśvinīvrkṣa (17.73), avitāna (8.40; 10.24),⁶⁵³ bāhuvallī (6.15; 7.68),⁶⁵⁴ dorvallī (7.60 and 64; 8.41),⁶⁵⁵ doṣā (7.42 and 66; 9.72; 10.5 and 41),⁶⁵⁶ gāyaki (7.66),⁶⁵⁷ ijhaṭā (31.68), jāri (31.66), kapotī (7.56), kāraskara (10.45),⁶⁵⁸ lakṣmī (9.62; 29.23),⁶⁵⁹ mohinī (10.12; 20.32),⁶⁶⁰ mūrdhapuṣpī (7.66),⁶⁶¹ nandīyāvarta (7.60; 21.9; 31.71),⁶⁶² papphaṇa (29.39), phaṇitaka (30.4), phirā (9.51 and 52), rājamohinī (31.64), sadābhadrā (19.40), sāgarairāṇḍa (9.60),⁶⁶³ samīrasakha (6.59),⁶⁶⁴ saṃmohinī (31.73), śauṇḍī (8.38),⁶⁶⁵ sitehā (10.15), śophaghnī (6.54 and 58),⁶⁶⁶ sphoṭikā (7.59), śūlī (8.32), śyenā (17.75),⁶⁶⁷ taṭāka (9.51),⁶⁶⁸ tāpiccha (9.36; 16.6),⁶⁶⁹ triśūlī (31.63), tuṇḍī (8.40; 9.43, 55 and 58; 16.22),⁶⁷⁰ uttamā karṇikā (9.48),⁶⁷¹ uttānaparṇī (31.68), vanakuṣṭha (7.61), vanāmbā (7.61), vega (6.13),⁶⁷² vijayarāga (6.17), viṣataru (17.70 and 74),⁶⁷³ vyāghāta (9.33; 16.19), vyāghātaka (8.41),⁶⁷⁴ yāmatatī (7.67),⁶⁷⁵ and yāminī (7.59 and 61; 10.39).⁶⁷⁶

Nārāyaṇa informs us⁶⁷⁷ that he was a son of Nārāyaṇa and Umā, and a brother of Gaurī; his maternal uncle was called Parameśvara. His family lived in Śivapura on the banks of the river Nīlā. He is reported to have acquired his knowledge of mantraśāstra through efforts to get rid of a disease which was either kuṣṭha or pakṣavādha. In Kerala he is regarded as the author of the *Lakṣaṇāmṛta*⁶⁷⁸ and other works on agadatantra.

The Nārāyaṇa who wrote the Bhāgavata work called *Nārāyaṇīya* should be distin-

guished from the author of the *Tantrasārasaṅgraha*. The former, a devotee of Kṛṣṇa, who lived in the village Navagrāma on the banks of the Nilā in the period 1550–1650, was called Nārāyaṇabhaṭṭatṛipāda.⁶⁷⁹

The *Tantrasārasaṅgraha* may be earlier than the *Īśānaśivagurudevapaddhati* (twelfth century),⁶⁸⁰ which borrows from and refers to it as *Nārāyaṇīya*,⁶⁸¹ The work precedes the *Bhesajjamañjūsānnaya* (completed in A.D. 1734), and Anantakumāra's *Yogarātnasamuccaya*, which quote it.

Some scholars regard it as belonging to the sixteenth century.⁶⁸²

The commentary on the *Tantrasārasaṅgraha* was written by an unknown author, but it is sometimes, on insufficient grounds, ascribed to Nārāyaṇa himself.⁶⁸³ It was evidently composed in Southern India, since it gives the Tamil and Malayālam equivalents of many terms, especially of the names of plants and animals. In this respect it abounds in repetitions. Apart from that, it contains much interesting Tantric material. Quotations are nowhere referred to their sources.

NĀRĀYAṆAṆḌITA: *Vaidyaratnākara*.⁶⁸⁴

NĀRĀYAṆARĀJA: *Nārāyaṇavilāsa*.⁶⁸⁵ This work is one of the sources of the *Rasayogaśāgara*.⁶⁸⁶

NĀTHAṆḌITA: *Aṣṭāṅgakāṇḍa*.⁶⁸⁷

NEMICANDRA: *Dravyasaṅgraha*.⁶⁸⁸

NĪLAKAṆṬHA was the author of the *Basavarājīya*⁶⁸⁹ or *Vṛṣarājīya*,⁶⁹⁰ an extensive medical treatise, divided into twenty-five chapters (*prakaraṇa*).

Chapter one: generalities, the examination of the pulse, fevers, krimiroga, jvarā-tisāra, atisāra; chapter two: saṃnipāta fevers; chapter three: the doṣas, the examination of the urine; chapter four: kṣaya and rājayakṣman; chapter five: pāṇḍuroga, halīmaka, śopha, kāmālā; chapter six: vātavyādhi; chapter seven: twenty-four pitta diseases and chardi; chapter eight: kāsa, śvāsa, hikkā; chapter nine: meha, mehavraṇa, mūtrakṛcchra, mūtrāghāta, āsmarī.

Chapter ten: grahaṇī, atisāra; chapter eleven: udara, ānāha and udāvarta, vidradhi; chapter twelve: tṛṣṇā, dāha, hṛdroga, viṣūcī, alasaka, vilambikā, agnimāndya, ajīṛṇa; chapter thirteen: kuṣṭha, visarpa, viṣphoṭaka; chapter fourteen: arśas, upadarīśa, śū-kadoṣa, aṇḍavṛddhi; chapter fifteen: vandhyātva, ārtavadoṣa, garbhapaṭa, garbhaśūla, gudabhrāmśa, garbhīṇiroga, etc.; chapter sixteen: asṛgdara, kusumaroga, asthisrāva, yonivyāpad, yonikanda, garbhapaṭa, mūḍhagarbha, sūtikāroga, stanaroga, somaroga, etc.; chapter seventeen: netraroga; chapter eighteen: medoroga, kārśya, madātyaya, nāsāroga, śīroroga; chapter nineteen: gulma, tūnī, pratitūnī, aṣṭhīlā, pratyāṣṭhīlā, śūla; chapter twenty: unmāda, apasmāra.

Chapter twenty-one: bhagandara, vraṇa, āgantukavraṇa, nāḍīvraṇa, agnidagdha-vraṇa, lūtavraṇa, markāṭīroga, arbuda, galagaṇḍa, gaṇḍamālā, kaṇaroga, mukharoga, tuṇḍivraṇa, kūpavraṇa, snāyukavraṇa, stanavraṇa, granthi, galakīlā, āśyasphoṭa, kīlaka, kālasphoṭa, ślīpada; chapter twenty-two: kṣudraroga, svarabhaṅga, vadana-

durgandha, kandubhedana, chāyāroga, arocaka; chapter twenty-three: viṣa; chapter twenty-four: karmavipāka; chapter twenty-five: alchemy.

The treatise ends with a list of diseases.

The *Basavarājīya* describes the aetiology, symptomatology and therapy of the diseases mentioned. The arrangement of the diseases is not in conformity with the *Mādhavanidāna*, nor with Vāgbhaṭa's order. The prescriptions are of both āyurvedic and iatrochemical types.⁶⁹¹

Some parts of the treatise are not in Sanskrit, but in Telugu.

Sources referred to or quoted are: *Agnimata* (1, 27,⁶⁹² 90, 387), *Agniveśa* (27), *Āśvina* (159), *Āśvinīkalpa* (58, 78, 83, 88, 90, 122, 126, 243, 250, 282, etc.), *Āśvinīnighaṇṭu* (22, 146),⁶⁹³ *Āśvinīya* (1, 11), *Āyurveda* (1, 8, 10, 11, 13, 15, 19, 21, 22, 24, etc.), *Bhairavakalpa* (1, 60, 89, 198, 205),⁶⁹⁴ *Bheṣajakalpa* (1, 13, 20, 32, 73, 227, 257, 270, 295, 362), *Brahmagāruḍa* (1, 362, 364),⁶⁹⁵ *Candrabhāṣya* (268),⁶⁹⁶ *Candrakalpa* (1),⁶⁹⁷ *Caraka* (1, 2, 18, 22, 30, 73, 74, 108, 118, 119, etc.),⁶⁹⁸ *Cikitsāsārasaṃgraha* (1, 90, 172), *Cikitsāsārasiddhasaṃgraha* (13, 129, 159, 177, 179, 189, 192, 195, 207, 226, etc.),⁶⁹⁹ *Cintāmaṇi* (1, 10, 27, 49, 50, 51, 52, 53, 54, 76, etc.), *Deviśāstra* (1, 77, 385, 400),⁷⁰⁰ *Hārīta* (27), *Hārītātreyakasaṃhitā* (11),⁷⁰¹ *Hemādri* (370), *Jātukakarṇaka* (1), *Jātukarṇa* (190), *Jātukarṇanighaṇṭu* (85),⁷⁰² *jyotiṣśāstra* (366, 369, 370, 371, 372, 373, 374, 375), *jyotiṣa* (1, 58), *Karmakāṇḍa* (371),⁷⁰³ *Karmavipāka* (1, 72), *Karmavipākasamgraha* (368), *Kāśīkhanda* (1, 307), *Kaumudī* (109), *Lohatantra* (84), *Mādhavakalpa* (1, 59, 60, 70, 100, 123, 163, 171, 194, 201, etc.),⁷⁰⁴ *Mādhavanidāna* (very often),⁷⁰⁵ *Mādhavīya* (1, 194⁷⁰⁶), *Nandināthīya* (1, 165),⁷⁰⁷ *Nighaṇṭu* (387, 393, 396, 398, 401, 402, 403, 412, 415), *Nityanāthīya* (1, 23, 26, 27, 29, 30, 34, 35, 49, etc.), *Pārāsarya* (368), *Pārijāta* (109), *Pūjyapādīya* (1, 8, 21, 33, 41, 42, 60, 78, 81, 111, etc.), *Rasaratnākara* (27, 31, 32, 33, 34, 35, 81, 130, 143, 148, etc.), *Rasārṇava* (2), *Revaṇakalpaka* (1), *Revaṇasiddhabhāṣya* (64),⁷⁰⁸ *Śārīra* (70, 130, 132, 182, 185, 216, 222, 236, 237, 269, etc.), *Śārīranighaṇṭu* (82),⁷⁰⁹ 115⁷¹⁰),⁷¹¹ *Śārīrasūtra*(*sthāna*) (1, 115), *Siddharasārṇava* (1, 8, 11, 18, 26, 28, 29, 31, 32, 38, etc.),⁷¹² *Siddhasaṃgraha* (73, 88, 131, 181, 196, 243),⁷¹³ *Siddhasārasaṃgraha* (178),⁷¹⁴ *Siddhavidyābhū* (1, 2, 8, 12, 16, 21, 33, 57, 58, 69, etc.),⁷¹⁵ *Sindūradarpaṇa* (1, 97),⁷¹⁶ *Sindūramanidarpaṇa* (31, 110, 127, 129, 133, 164, 180, 195, 222, 244, etc.),⁷¹⁷ *Sūrasūtra* (270),⁷¹⁸ *Sūtrasthāna* (83, 230), and Vāgbhaṭa or Vāhaṭa (1, 8, 10, 14, 15, 16, 17, 18, 19, 20, etc.).⁷¹⁹

To this list have to be added: *Cintāmaṇinighaṇṭu*,⁷²⁰ *Pūjyapādanighaṇṭu*, and *Sūtrarājāratnākara*,⁷²¹ as well as *Rakṣākarmasūtra*,⁷²² *Rasahrdayatantra*, *Rasendrasaṃhitā*, and *Suśruta*.⁷²³

The *Basavarājīya* is referred to in Gulrājśarmamiśra's *Siddhaprayogalatikā*,⁷²⁴ it is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasaṃhitā*, *Harīśaraṇānanda's Kūṭṭhāpikavarasānimāṇaviijñāna*, and *Satyadeva Vāsiṣṭha's* commentary on Rāvaṇa's *Nāḍīparīkṣā*. *Basavarāja's Basavarājīya* is one of the sources of the *Rasayogasāgara*.

Caraka is said to belong to the Kṛtayuga, the *Rasārṇava* to the Tretā-, the *Siddhavidyābhū* to the Dvāpara-, and the *Basavaka* to the Kaliyuga. The order of the diseases disagrees with the *Mādhavanidāna*, except in the chapter on karmavipāka (ch. 24). Dis-

eases described by Mādhava, but omitted by Basava in the main body of his work, are vātarakta, bhagna, masūrīkā, and bālaroga. The chapter on fevers (ch. 1), however, includes a masūrījvara; vātarakta is mentioned in the list of disorders at the end of the *Basavarājya*. Completely absent are vardhma, phirangaroga, and śītalā, but snāyuka and somaroga were known to Basava. The names of fever in various living beings and inanimate substances are enumerated (7). Unusual types of fever described are masūrījvara (11–12), śaktījvara (11), kālajvara (22), viṣūcikājvara (24), kāmālājvara (25), and sūtikājvara (26). Ten stages (avasthā) of fever are mentioned (26).

Two series of thirteen saṃnipāta fevers are described. The first series consists of sandhika, tāndrika, pralāpa, cittavibhrama, jihvaka, karṇika,⁷²⁵ rugdāha, antaka, bhugnanetra, kaṇṭhakubja, raktaṣṭhīviṇ, śītagātra, and abhinyāsa (50–54).⁷²⁶ Each member of this first series is characterized four times, according to the descriptions of the *Mādhavanidāna*,⁷²⁷ *Āyurveda*, *Nityanāthīya*, and *Cintāmaṇi*. The characterizations said to be from a treatise called *Āyurveda* are also found in the *Prahitasaṃhitā* and *Yogarāṇakara*; the remaining ones are unknown from other texts.

The second series consists of viṣphāraka, āśukārin,⁷²⁸ kampana, babhru, śīghrakārin, bhalla, kūṭapālaka, saṃmohaka, pālaka, yāmya, krakaca, karkaṭaka, and vaidārika (54–57). The descriptions of these fevers are identical with those by Vaṅgasena and Bhāvamīśra.

Chapter two describes four abnormal colours of the tongue (59–60). Chapter six states at its beginning (92) that eighty disorders by vāta will be enumerated, but the list following this statement has only a number of seventy-one. This highly unusual list, which completely disagrees with the eighty vātavikāras of the *Carakasamhitā* and the vāta disorders of many medical treatises, mentions ūrdhāvāta,⁷²⁹ śīrovāta, pakṣāghāta, pārsavāta, ardhāṅgavāta,⁷³⁰ kampavāta,⁷³¹ ūrustambha,⁷³² kikkasa,⁷³³ raktavāta,⁷³⁴ amlavāta, kaphavāta, sādhyavāta, dhanurvāta,⁷³⁵ timiravāta, kaṇṭhavāta, kākavāta, śītavāta, nayanavāta, udaravāta, nāsāvāta, mukhavāta, avayavāṅgavāta, jihvāṅgavāta,⁷³⁶ naravāta, karṇavāta, āmavāta,⁷³⁷ tvagvāta,⁷³⁸ aṇuvāta, āṅgavāta, bhramaṇavāta, malabaddha, gulmavāta, mūtrabaddha, bāhukampa, skandhavāta, mandavāta, jānuvāta, jaṅghavāta, pādavāta, kandharavāta, aṅgulīvāta, anulomavāta, vilomavāta, suptavāta,⁷³⁹ koṣṭhavāta, bastivāta, śuṣkavāta, sthānavāta, kuṣṭhivāta, asthivāta,⁷⁴⁰ majjāvāta,⁷⁴¹ ekāṅgavāta, kṣīṇavāta,⁷⁴² vasāvāta,⁷⁴³ madhuvāta, kṣudhāvāta, śrṅghalavāta, sphoṭavāta, snāyuvāta,⁷⁴⁴ prasūtivāta, ajīrṇavāta, ātapavāta, agnīvāta, svarahīna, kharājaka, kalāvāta, daṇḍavāta,⁷⁴⁵ kṣatavāta, paṅguvāta,⁷⁴⁶ dadhivāta, and unmādavāta.

The vāta diseases characterized in chapter six are for the greater part, but in a different order, those enumerated in this list,⁷⁴⁷ but some of the latter are absent: naravāta, āṅgavāta, sthānavāta,⁷⁴⁸ and kṣudhāvāta. Vāta diseases described in chapter six, although absent from the list, are: dhūmavāta (93), vidhūmavāta (94), kṣutavāta (96), grdhrasīvāta (97),⁷⁴⁹ pārṇśuvāta (98), śuklavāta (98), bhogavāta (99), kaṭivāta (99),⁷⁵⁰ sirāvāta (101),⁷⁵¹ ādhyavāta (106),⁷⁵² sandhivāta (106),⁷⁵³ styānavāta (108), gulphavāta (108), ardita (111),⁷⁵⁴ badhiravāta (113), and orugavāta (114).⁷⁵⁵ At the end of chapter six, Basava gives a list and descriptions of vāta diseases according to another treatise. This second list includes a considerable part of the usually recognized

vāta disorders.⁷⁵⁶

A list of twenty-four pitta diseases, completely different from the forty pitta disorders of the *Carakasamhitā*, is found at the beginning of chapter seven. The list consists of avarṇa, vivarṇa, sūryavarṇa, kāmālā, āmla, rakta, sveda, unmatta, pauṇḍra, sarpika, karapāda, śīta, mūrchā, madhuka, kusumaka, krodha, bhraṇśa, śīras, kṣudh, tṛṣṇā, durbhāva, carman, durgandha, and madana. The descriptions of the pitta diseases are largely in the same order: āvarṇapaittya, vivarṇapaittya, sūryavarṇa, kāmālā, amlapitta, svedapitta, unmāḍapaittya, puṇḍarīka, karapāda, śītapitta, mūrchāpitta, madhupitta, kusumapitta (and nāsikākusuma = nosebleed), krodhapitta, bhraṇśapitta, śīraḥpitta, kṣudhāpitta, tṛṣṇāpitta, durbhāvapitta, carmapitta, madanapitta, visarpapitta,⁷⁵⁷ and raktapitta (as well as asṛgdara). The remaining part of the chapter is devoted to renewed descriptions of amlapitta and mūrchā.

Chapter eight, on cough (kāsa), describes at first five types of kāsa, in agreement with the *Mādhavanidāna*, followed by another list consisting of twenty varieties, which are subsequently characterized: pūrvakāsa, kṣayakāsa, raktakāsa, cippikākāsa, vātakāsa, pittakāsa, kṣatakāsa, śūktikākāsa, āmakāsa, pāṇḍukāsa, kṛṣṇakāsa, śleṣmakāsa, dadhikāsa, śleṣmajihvakakāsa, kaṇṭhajihvakakāsa, upajihvakakāsa, jihvakakāsa, ūrdhvakāsa, śleṣmabhaṅga or bhaṅgāliśleṣmaka, and kuṣṭhakāsa or śleṣmakuṣṭha.

Chapter twelve enumerates the symptoms of three doṣaja types of viṣūcī and five complications of this disease (201). Chapter thirteen mentions kuṣṭha, jvara, śoṣa and netrārbhisaṇḍa as contagious diseases (aupasargikaroga; 211). Chapter fifteen refers to parasitic organisms in the uterus (241). Chapter sixteen describes the disease called asthisrāva (248). Chapter seventeen refers to a number of ninety-four eye diseases (259).⁷⁵⁸ Chapter twenty-one describes burns (agnidagdhaḥvaraṇa; 321), lūtaḥvaraṇa (322), and several varieties of a disease called markatīroga (323–325);⁷⁵⁹ the number of mukharogas is said to be sixty-four (334);⁷⁶⁰ some unusual mukharogas described are galagranthi (347), galakīla (347), and āśyaspṛṣṭa (347–348); two other rarely mentioned disorders are kīlaka (348) and kālasphoṭa (348). Chapter twenty-one deals, among other things, with diseases called kandubhedana (361) and chāyāroga (361).⁷⁶¹

The author's name is Nīlakaṇṭhakṛtūru Basavarāja, son of Namaḥśivāya, who was a disciple of Rāmadesika of the Niḍimāmiḍi family.⁷⁶² He calls himself the moon of the Nīlakaṇṭha family⁷⁶³ and belonged to the Vīraśaiva sect.⁷⁶⁴ The name of his guru may have been Jaṅgameśa.⁷⁶⁵ The *Basavarājīya* is especially popular among the vaidyas of Āndhra Pradesh.⁷⁶⁶

It is difficult to establish an exact date of the *Basavarājīya*. The developed state of nāḍīparīkṣā and rasaśāstra, and the quotation from Hemādri, indicate that it cannot be earlier than the fourteenth century. The prescription of rasakarpūra,⁷⁶⁷ although not yet against phiraṅgaroga, points to the sixteenth century as the period of its composition. This is confirmed by the presence of China root⁷⁶⁸ in the prescriptions against venereal diseases.⁷⁶⁹

NĪLAKAṆṬHA: *Nīlakaṇṭhasaṃgraha*, a work on pathology and therapy, containing numerous prescriptions with special names. This treatise is sometimes characterized as a physician's vademecum. Caraka is quoted with preference, and Mādhava is followed

in the arrangement of the diseases. General subjects and religious therapy are also dealt with.

Nīlakaṇṭha was a son of Narahari and Sāvitrī and belonged to the Vaidya caste. His uncle was Śrīdhara of Dhanvantarigotra; one of his more remote ancestors was Tripurāridhana, a mahopādhyāya.⁷⁷⁰

NĪLAKAṆṬHAMĪŚRA: *Paryāyārṇava*, a medical lexicon in five chapters (taraṅga).⁷⁷¹

NITYANĀTHA, Śrīnātha or Nāgabhaṭṭa was the author of the *Kāmaratna*,⁷⁷² a popular Tantric treatise⁷⁷³ on ṣaṭkarman and other types of magic.

The work⁷⁷⁴ consists of about 1,400 verses,⁷⁷⁵ arranged in sixteen chapters.⁷⁷⁶ Some of the subjects are: vaśīkaraṇa (subjugation; 1.38–107),⁷⁷⁷ ākarṣaṇa (attraction; 2.1–16),⁷⁷⁸ jaya (victory over adversaries; 3.1–19), stambhana (immobilization; 4.1–82),⁷⁷⁹ mohana (delusion; 5.1–17), rañjana (pleasing; 5.18–94), vājīkaraṇa (aphrodisiacs; 6.1–91),⁷⁸⁰ uccāṭana (eradication; 10.1–15), vidveṣaṇa (sowing dissension; 10.16–22),⁷⁸¹ māraṇa (killing; 10.42–59), kautuka (awesome feats; 11.1–36),⁷⁸² kāmyasiddhi (procuring desired ends; 12.1–113), yakṣiṇśādhana (propitiation of yakṣiṇīs; 15.1–51).⁷⁸³

Subjects more or less related to medicine are: delaying or preventing ejaculation (śukrastambhana; 4.44–82),⁷⁸⁴ the prevention of a foul smell and sweating (5.19–31), the treatment of disorders of the skin, especially those affecting the face (pitākā, nīlī, vyaṅga, tilakāla, śyāmikā; 5.42–56),⁷⁸⁵ recipes against lice and nits (5.98–105)⁷⁸⁶ and against premature baldness (indralupta; 5.106–117), aphrodisiacs (vājīkaraṇa; 6.1–91), tightening the vagina (gāhīkaraṇa; 7.1–10),⁷⁸⁷ increasing the size of the male organ⁷⁸⁸ and promoting erection (kāmadhvajasthūlīkaraṇa; 7.33–54), increasing the size and firmness of the female breasts (stanavardhana; 7.55–71),⁷⁸⁹ removal of the pubic hair in women (lomaśātana; 7.74–86),⁷⁹⁰ bringing about impotence (saṇḍhīkaraṇa; 8.1–9),⁷⁹¹ curing impotence caused by ill-disposed women (duṣṭaśrīkṛtadvajapātothāpana; 8.10–13), making the female organs inaccessible to another male (yonibandhana; 8.14–24),⁷⁹² bringing about menstruation (puṣpakaraṇa; 8.26–31),⁷⁹³ bringing about miscarriage (garbhapātana; 8.33–40),⁷⁹⁴ stopping menorrhagia and metrorrhagia (pradara; 8.41–58), the treatment of sterility in women (janmavandhyācikitsā; 8.60–93),⁷⁹⁵ the treatment of sterility subsequent to the birth of the first child (kākavandhyācikitsā; 8.94–98),⁷⁹⁶ the treatment of women whose children die at an early age (mṛtavatsācikitsā; 8.99–112),⁷⁹⁷ measures protecting the unborn child (garbharakṣā; 8.120–140),⁷⁹⁸ the treatment of disorders in pregnant women (sāmānyācikitsā; 8.141–158),⁷⁹⁹ measures securing an easy delivery (sukhaprasava; 8.160–164),⁸⁰⁰ measures against bālagrahas (8.165–180),⁸⁰¹ the therapy of the children's disease called ahiṭuṇḍikā (8.181–183),⁸⁰² bringing about sleep (nidrākaraṇa; 9.20–24) or sleeplessness (nidrānāśana; 9.25–28),⁸⁰³ causing diseases to appear (vyādhīkaraṇa; 10.23–33),⁸⁰⁴ causing insanity (unmattīkaraṇa; 10.36–41), recipes against diseases of eyes, ears, teeth, etc. (12.51–93),⁸⁰⁵ allaying hunger and thirst (12.98–105). Chapter fourteen is about vegetable (1–23) and animal poisons (24–152), upaviṣas (153–155), factitious poisons (156–166), poisons arising

when substances are mixed (167–171), and the poisonous substance in bhallātaka oil (172–173). Chapter fifteen is concerned with the purification of mercury (1–41), cinnabar (hiṅgula; 42), sulphur (43–47), mica (48–65), and other, mostly inorganic, substances.

Authorities to whom recipes are attributed are: Bhojarāja (5.26), Bhūpati (8.159), Cakradatta (7.58), the author of the *Haramekhālā* (8.21), Kavipuṅgava (8.187), Mahādeva (13.66), Mūladeva (7.6; 8.28 and 142), Nāgārjuna (4.42 and 66),⁸⁰⁶ Nārada (6.37), Nityanātha (6.78), Rantideva (5.45; 7.10),⁸⁰⁷ Śambhu (13.16), Śiva (13.19; 14.126), Vātsyāyana (1.106), and Viśvāmītra (1.62). The *Vīratāntra* is the only work quoted by name (10.14–15).⁸⁰⁸

Nityanātha's *Kāmaratna* is mentioned among the sources of the *Rasayogasāgara*.⁸⁰⁹ The *Kāmaratna* is one of the sources of a *Kautukasāroddhāra*.⁸¹⁰ The work is quoted in the *Pāradasaṃhitā* and *Rasatattvavivecana*. It is referred to in Khare's commentary on the *Rasaratnasamuccaya*.

The *Kāmaratna* has many verses in common with the *Kakṣapuṭa*.⁸¹¹

Premature baldness (indralupta) goes under the name of vāyukṣīroṭaka (5.113).

Noteworthy names of plants are: añkulī (4.5), bhaṭikā (4.78), daṇḍā (8.9),⁸¹² karkaśā (6.55), keśarāja (5.3),⁸¹³ mahākālā (4.79; 5.81),⁸¹⁴ methī (6.30 and 74), munikhaṇḍakaśāka (9.23), peṭārikā (8.49),⁸¹⁵ raktāgastya (6.43), sitapikataru (6.6),⁸¹⁶ śubhā (5.9),⁸¹⁷ śvetabandhūka (4.76), śvetānyapuṣṭākhyataru (4.53), śvetapikākṣa (4.52), trailokyavijayā (i.e., bhaṅgā; 6.28), triśūlī (3.26), and triśūlinī (14.59).

Since Bhojarāja, Cakradatta, and the author of the *Haramekhālā* are referred to, the work cannot be earlier than about A.D. 1100.

NITYANĀTHASIDDHA: *Vandhyāvalī*.⁸¹⁸

NR̥HARI: *Takrapānavidhi*.⁸¹⁹

NR̥SĪMHA: *Nṛsīmhanidāna*.⁸²⁰ The author mentions aṣṭasthānaparīkṣā and begins his work with nāḍiparīkṣā. The first chapter is called aśtīvātavyādhinidāna; Nityānanda is referred to in its colophon. At the end, Nṛsīmha describes many diseases as persons forming part of the court of their king, Kṣaya. His queen is Sukāmilā, his general (camūpati) Pāṇḍuroga, his sons are the several forms of Raktapitta, his companions are Śopha and Atisāra, his two ministers Śvāsa and Kāsa, his spies Vāta and Pitta, his horses Vāntika and Aruci, his singers and musicians Grahaṇī, Arśas, Gulma, and Śūla.⁸²¹

NR̥SĪMHA BHATṬA: *Tāmbūlakalpasamgraha*. This work on betel chewing quotes the following authors and works: Āśvalāyanācārya, Atri, Bharadvāja, Dakṣa, Devala, Hemādri, Kātyāyana's *Smṛticandrikā*,⁸²² Mārkaṇḍeyapurāṇa, *Samgraha*, Śātātapa, *Smṛtimañjarī*,⁸²³ Vaidya, Vasiṣṭha, *Vijñāneśvarīya* (i.e., the *Mitākṣarā* on the *Yājñavalkyasmṛiti*), *Vṛddhavasīṣṭha*, and Vyāsa.

The reference to Hemādri establishes that the work cannot be dated earlier than the fourteenth century.⁸²⁴

NR̥SIMHAPAṆḌITA KĀŚMĪRA: *Guṇasārasamuccaya*.⁸²⁵

NR̥SIMHA SŪRI: *Vaidyasārasaṃgraha*.⁸²⁶

PADMANĀBHA: *Cikitsāsaṃgraha*.⁸²⁷

PĀNAKĀLARĀYA: *Netradarpaṇamu*, a treatise on eye diseases and their treatment, written in Telugu and dating from the sixteenth century.⁸²⁸

This work distinguishes ninety-six eye diseases. Those mentioned are:⁸²⁹ four types of *kāca* (red, white, black, yellow), *śvetapaṭala*, *raktapaṭala*, *pīṭapaṭala*, *kr̥ṣṇapaṭala*, *divāṇḍha*,⁸³⁰ *timira*, *netrapuṣpa*, *niśāṇḍha*,⁸³¹ *jalasrāva*, *atisrāva*, *durmāṃsa*, *netravāta*, *netragandhi*, *netradāha*, *netraśoṭha*, *netraśūla*, *netralūtikā*, *kr̥ṣṇapilla*, *śuklapilla*, *raktapilla*, *netrakāya*, *raktagrānṭhi*, *netrabudbuda*, *netrasūkṣmacalana*, *netracalana*, *catvāri*, *netrabandha*, *netrabhagna*, *netrajāra*, *netramāliṇya*, *netrārśas*, *netrabrahmaṇa*, *netranīścita*, *netrakhaṇḍa*, *dvinetra*, *ūrdhavadṛṣṭi*, *netrāgni*, *adhodṛṣṭi*, *netrapūya*, *netrakuṣṭha*, *netrapāta*, *netronmīlana*, *netranimīlana*, *netrārdhadṛṣṭi*, *netramala*, *netragurtana*, *mandadr̥ṣṭi*, *śuklapuṣpa*, *raktapuṣpa*, *kr̥ṣṇamaṇḍala*, *agnigrānṭhi*, *netrātimala*, *pīṭapuṣpa*, *pakṣāghāta*, *pakṣaśūla*, *netravalmika*, *pakṣadāha*, *pakṣapaḥkṣman*, *pakṣaśobha*, *pakṣacalana*, *pakṣāticalana*, *pakṣajāta*, *padmakāya*, *padmakhaṇḍa*, *padmārbuda*, *jalasrāva* (mentioned for the second time), *netrapārśvaśūla*, *netrapārśva*, *netrapārśvakaṇḍūti*, *netrapārśvacāñcalya*, *netrapārśvaśobha*, *netraśaraṇa*, *netrarodha*, *netrapārśvarakta*, *netravilokana*, *netraphalla*, *netrasphoṭaka*, *netragādhāgni*, *duḥkhanetra*, *netrapuṣpa*, *pakṣadurmāṃsa*, *netrapipīlikā*, *durmadāṇḍha*, *netradurmāṃsa*, *vātābhiṣyanda*, *netrātiroma*, *kaphābhiṣyanda*, *raktābhiṣyanda*, and *pittābhiṣyanda*.⁸³²

Thirty-five different ointments are described.

Spectacles were known to the author.

PARAMĀNANDA: *Bālacikitsā*.⁸³³

PARAMĀNANDA, son of Balabhadra: *Paramānandavilāsa*.⁸³⁴

PARAMĀNANDA: *Svarodaya*.⁸³⁵

PARAMĀNANDA MIŚRA, son of Narottama Miśra: *Siddhāntadīpa*.⁸³⁶

PARAMEŚVARARAKṢITA: *Garjādhyāya*, on the classification of medicines.⁸³⁷

PĀRŚVADEVA: *Sukarayogarātnāvalī*.⁸³⁸

PĀRVATINĀTHA: *Paryāyamuktāvalī*.⁸³⁹

PERANA: *Vaidyasāramu*, a work in Telugu, containing many prescriptions and procedures popular in Āndhra, and written on the lines of the *siddhakriyās* of the Navanātha Siddhas; it may date from about A.D. 1600.⁸⁴⁰

PRĀṆANĀTHA, son of Kātyāyana Bhaṭṭa: *Bhaiṣajyasārāṃṭasamhitā*.⁸⁴¹

PRAȲĀGA: *Prayāgasamgraha*.⁸⁴²

PRĪTIRĀMASENA: *Sāratilaka*, a work on fevers.⁸⁴³

PŪJYAPĀDA⁸⁴⁴ is credited with:⁸⁴⁵ (1) *Auśadhayogagrantha*;⁸⁴⁶ (2) *Bālagrahaśūnti*;⁸⁴⁷ (3) *Bhaiṣajyagunārṇava*;⁸⁴⁸ (4) *Cikitsāviśaya*;⁸⁴⁹ (5) *Kalyāṇakāraka*;⁸⁵⁰ (6) *Madanakāmaratna*;⁸⁵¹ (7) *Madanasnuhīrasāyana*;⁸⁵² (8) *Mahāpūṇacandrodaya*;⁸⁵³ (9) *Nāṭi-*

parīkṣā;⁸⁵⁴ (10) *Nidānamuktāvalī*⁸⁵⁵ or *Siddhāntibhāṣya*;⁸⁵⁶ (11) *Pūjyapādavaidyaka*;⁸⁵⁷ (12) *Rasaratnākara*;⁸⁵⁷ (13) *Rasatantra*;⁸⁵⁸ (14) *Ratnākārādyauśadhayogagrantha*;⁸⁵⁸ (15) *Rudantyaḍīkalpa*;⁸⁵⁹ (16) *Surasasaṃgraha*;⁸⁶⁰ (17) *Śūlakūṭhāryauśadhavidhi*;⁸⁶¹ (18) *Vaidyakagrantha* or *-śāstra*;⁸⁶² (19) *Vaidyakayogaṣaṃgraha*, *Vaidyasāra* or *-sārasaṃgraha*;⁸⁶³ (20) *Vaidyavidhāna*;⁸⁶⁴ (21) *Vidyāvinoda*;⁸⁶⁵ (22) *Vīryavṛddhyauśadhavidhāna*.⁸⁶⁶

A *Pūjyapādanighaṇṭu* is quoted in Basavarāja's *Basavatantra*.⁸⁶⁷ A *Samādhiśataka* by Pūjyapāda(?) is also recorded.⁸⁶⁸ Gommatadeva refers in his *Merutantra* to a *Vaidyāmṛta* by Pūjyapāda.⁸⁶⁹ A *Netraprakāśikā* in the form of a dialogue between Hayagrīva and Pūjyapāda is also known.⁸⁷⁰

A number of the mentioned works are sometimes ascribed to Devacandra:⁸⁷¹ *Bhaiṣajyaguṇārṇava*,⁸⁷² *Madanakāmaratna*,⁸⁷³ *Nidānamuktāvalī*,⁸⁷⁴ *Ratnākārādyauśadhayogagrantha*,⁸⁷⁵ and *Rudantyaḍīkalpa*.⁸⁷⁶

Formulae attributed to Pūjyapāda are found in many medical treatises, e.g., in an *Auśadhayogagrantha*,⁸⁷⁷ the *Āyurvedasaukhya* of Toḍara, the *Basavarājīya*,⁸⁷⁸ the *Brhannighaṇṭuratanākara*,⁸⁷⁹ the *Cikitsāsāra* of Gopāladāsa,⁸⁸⁰ the *Rasapārijāta*,⁸⁸¹ the *Rasapradīpa* of Prāṇanātha,⁸⁸² a *Rasaratnākara*,⁸⁸³ the *Rasaratnakaumudī*,⁸⁸⁴ the *Ratnākaraūśadhayoga*,⁸⁸⁵ a *Rudantyaḍīkalpa*,⁸⁸⁶ the *Sahasrayoga*,⁸⁸⁷ the *Tailaprayoga*,⁸⁸⁸ the *Vāhaṭa* (or *Bāhaṭa*) by Gaurīputrakārttikeya,⁸⁸⁹ the *Vaidyacintāmaṇi*,⁸⁹⁰ and the *Yogaratanākara*.⁸⁹¹

Some of Pūjyapāda's prescriptions were couched in a style, peculiar to Jain medical works.⁸⁹²

References to Pūjyapāda as a medical author occur in the *Jñānārṇava* of Śubhacandra,⁸⁹³ the *Khagendramāṇidarpaṇa*,⁸⁹⁴ Khare's commentary on the *Rasaratnasamuccaya*, the *Pārsvaparaṇa* by Pārsvaparaṇḍita,⁸⁹⁵ the *Rasapradīpa*,⁸⁹⁶ the *Rasaratnasamuccaya*,⁸⁹⁷ the *Vaidyāśāstrapavartakācāryānāmasamuccaya*, Akalaṅka's *Vidyāvinoda*,⁸⁹⁸ and in an inscription.⁸⁹⁹

Pūjyapāda is mentioned as a Mahāsiddha in the *Haṭhayogapradīpikā* (1.7) and as a Rasasiddha in Caturbhuja's commentary on the *Rasaḥṛdaya* (1.7). Pūjyapāda's fame as a medical expert has remained alive until recent times.⁹⁰⁰

Opinions differ with regard to the identity of Pūjyapāda, author of the *Sarvārthasiddhi*, the *Jainendra* grammar, etc., with the medical author of the same name.⁹⁰¹ The former is dated to the first half of the fifth century,⁹⁰² latter half of the fifth century,⁹⁰³ the period A.D. 464–524,⁹⁰⁴ or about A.D. 700.⁹⁰⁵ The medical author is sometimes placed in the thirteenth century.⁹⁰⁶ His date is difficult to establish, but he is earlier than the *Khagendramāṇidarpaṇa* (A.D. 1360), which quotes him.

PURṆASETŪTTAMASŪRI: *Vṛddhayogaśataka* or *Vaidyavallabha*.⁹⁰⁷

PURUṢOTTAMA, pupil of Nīlakaṇṭha: *Bheṣajapaddhati*.⁹⁰⁸

PURUṢOTTAMA: *Vaidyakaśāra*.⁹⁰⁹

PURUṢOTTAMA, son of Jñānakara, grandson of Śaṃkara: *Yaśaścandrikā*.⁹¹⁰

PURUṢOTTAMADATTA: *Yogaratanasamgraha*.⁹¹¹

PURUṢOTTAMAPREṢṬHA: *Puruṣottamatarka*.⁹¹²

RĀMĀNANDAPANḌITA: *Ārogyakalpadruma*.⁹⁴⁵
 RĀMĀNĀRĀYAṆA KAṆṬHAHĀRA: *Yogapradīpa*.⁹⁴⁶

RĀMĀNĀTHA: *Yogamahāṇava*.⁹⁴⁷ This work is quoted in Hariśaraṇānanda's *Kūpī-pakvarasanirmāṇavijñāna*; it is one of the sources of the *Rasayogasāgara*.⁹⁴⁸

RĀMĀNUJA: *Bhaumāmṛta*.⁹⁴⁹
 RĀMĀNUJA YĀTIVARA: *Vaidyaratnāvalī*.⁹⁵⁰
 RĀMEŚVARA, pupil of Cintāmaṇi: *Sadyogacintāmaṇi*.⁹⁵¹
 RĀMEŚVARA: *Vaidyasarvasvasaṃgraha*.⁹⁵²

RĀVAṆA: *Arkaprakāśa*,⁹⁵³ a monograph on pharmaceutical preparations of the type called arka.⁹⁵⁴

The *Arkaprakāśa*,⁹⁵⁵ consisting of 985 verses⁹⁵⁶ which are arranged in ten chapters (śataka), has been composed in the form of a dialogue between Rāvaṇa and his wife Mandodarī, who is with child. Mandodarī asks her husband to explain to her the means by which she will remain free from pain, and which will make her child thrive. Rāvaṇa then proceeds to pass on to her the knowledge he received from Pārvatī (1.1–16).⁹⁵⁷ Nonetheless, the *Arkaprakāśa* is not predominantly concerned with kaumārabhr̥tya.

Chapter one deals, after the sixteen verses of the introduction, with the classification of medicinal plants (1.17–19) and the parts of these to be used (1.20–22); the basic concepts of pharmacology (1.23–45); five types of pharmaceutical preparation: kalka, cūrṇa, rasa, taila, and arka; of these, kalka has the weakest, arka the strongest action (1.46–49). The remaining part of chapter one is concerned with the yantra to be employed in the preparation of an arka (1.52–60), the cup for the ingestion of an arka (bhojanapātra; 1.61–69), the characteristics of a well-prepared arka (1.74–75), the way of ingesting it (1.79), the six types of fire used in preparing an arka (1.80–85), the characteristics of the messenger sent to the physician (1.92–94), the description of a rogoddhāracakra (1.95–96),⁹⁵⁸ and related subjects.

Chapter two deals with the five types of substances from which an arka can be extracted (2.1–37); removing a foul smell from an arka and conferring fragrance upon it (2.38–57); arkas made from meat (2.58–71); the preparation of mineral acids (2.72–80); different kinds of meat (2.81–83); the preparation of alcoholic beverages (2.84–97);⁹⁵⁹ the preparation of an arka from hemp (bhaṅgā) and thornapple seeds (dhattūrābīja; 2.98–99). Chapter three describes arkas from simples (kevalārka) and their effects. Chapter four is about groups of substances and their medicinal uses; animals are classified, and arkas prepared from their flesh described as remedial agents; at the end of the chapter (4.96), an arka prepared from human flesh is praised as a very potent agent against poison.⁹⁶⁰ Chapters five, six, and seven are about arkas to be prescribed against various diseases, which are, in broad outline, arranged in the same order as in the *Mādhavanidāna*. The second part of chapter six is devoted to the goddess Śītalā and the disease of that name. The contents of chapter eight are of a magical character; it is concerned with subjects like vaśīkaraṇa, vidveṣaṇa, uccāṭana, māraṇa, mohana, etc.⁹⁶¹ Chapter nine is about gaṇas (groups of substances, plants, and animals), and chapter ten

about subjects connected with alchemy.

Sources are not indicated in the *Arkaprakāśa*. The ingredients of some of the arkas described are strikingly similar to those of compound medicines found in the *Cakradatta*.⁹⁶²

The *Arkaprakāśa* is quoted in the *Āyurvedīya Khanijavijñāna*, by Kāñcīnātha in his commentary on the *Ratirahasya*,⁹⁶³ and in Nirañjanaprasāda Gupta's *Pāradasaṃhitā*. Rāvaṇa's *Arkaprakāśa* is mentioned in Khare's commentary on the *Rasaratnasamuccaya*. It is cited as Lañkānātha and Lañkeśa in the *Śāligrāmanighaṇṭhubhūṣaṇa* of the *Bṛhannighaṇṭuratnākara*.⁹⁶⁴

Sanskrit commentaries on the *Arkaprakāśa* were written by Nārāyaṇaprasāda⁹⁶⁵ and Rāmanātha Vaidya.⁹⁶⁶

The *Arkaprakāśa* is a unique text in being the only monograph on arkas, a type of pharmaceutical preparation not met with in most Sanskrit medical treatises. The term arka may have been borrowed from Arabic or Persian;⁹⁶⁷ the Arabic word 'araq, the original sense of which is sweat, conveys several meanings. In Islamic medicine it is used to denote a medicinal tincture, essence, or distilled spirit.⁹⁶⁸ The earliest Sanskrit text mentioning an arka is Soḍhala's *Gadanigraha* (prayogakhaṇḍa, āsavādhikāra 272). The arkas described in the *Arkaprakāśa* are prepared by means of a yantra, described in chapter one, that is half-way towards a distilling apparatus.⁹⁶⁹ The distillates obtained by means of this apparatus may have been more or less perishable, since it is recommended to add sulphur (gandhapāṣāṇa) to all arkas or fumigate them with it (2.41), which may have increased their storage life.⁹⁷⁰ A yantra, more suitable for distilling purposes, and used for the preparation of mineral acids, is described in chapter two (2.72–80).

The five types of medicinal preparation, namely kalka, cūrṇa, rasa, taila, and arka (1.46), form an unusual series, from which kvātha and śītakāṣāya are absent. The verses on the preparation of mineral acids (śaṅkhadrāvaka; 2.72–80) are interesting; the fluid produced, also called kṣārārka, has to be tested by dissolving bones, meat, and shells in it.

The arrangement of the diseases in chapters five to seven agrees partly with Mādhava's order. Differences are: the absence of arśas; the insertion of verses on children's diseases and the bālagrahas⁹⁷¹ between those on grahaṇī and agnimāndya (5.11–16); the addition of bhasmaka to the disorders of the digestive fire (5.21); the mention of insects (matkuṇa, makṣikā, maṣaka) and serpents in the verses on krimiroga (5.24); the insertion of verses on kaṇṭhadāha (5.35) and amlapitta (5.36) between raktapitta and rājayakṣman; the addition of verses on disorders caused by pitta (5.80) and kapha (5.81) between āmavāta and śūla; verses on gulma, plīharoga, and yakṛt (5.87–91) before those on mūtrakṛcchra up to prameha; the absence of verses on udara in general and on vṛddhi; verses on śoṭha (6.9–11) between vidradhi and vṛṇaśoṭha; the insertion of a verse on mṛtarakta (6.28) between bhagna and nāḍivṛṇa; verses on kuṣṭha (5.98–101) between medoroga and galagaṇḍa; the absence of verses on śītapitta and related disorders; the addition of snāyuroga (6.35) between visarpa and visphoṭaka; the addition of verses on phiraiṅga (6.38–40) between visphoṭaka and masūrī; a different order of the chapters on mukha-, karṇa-, nāsā-, netra-, and śīroroga; verses on viṣa (7.59–

68) before those on women's diseases; the addition of verses on somaroga (7.72) and bahumūtra (7.73) after those on pradara; the addition of verses on vājikaraṇa and related subjects at the end of chapter seven (7.92–98).

The *Arkaprakāśa* has two verses on diseases of elephants and horses (3.12; 4.53).

Chapter nine enumerates the items belonging to a rather long series of gaṇas, which are, partially, unusual; examples are: karṇa- (9.1), rañjana- (9.3–4), pācana- (9.57), uṣṇa- (9.58), dīpana- (9.59), and puṣṭikāragāṇa (9.60–61).

Chapter ten describes zinc (jasada; 10.24–26) among the metals.

An interesting section is formed by the second half of chapter six, devoted to Śītalā. It opens with a dialogue between Brahmā and Śiva. It tells that the living beings were created by Brahmā in the Kṛtayuga, but that danger has arisen in the present age because of their abundant multiplication. Brahmā asks Śiva about the measures that can be taken in order to improve this condition of the world. As a curative measure, Śiva creates from his trident a dreadful being, called Kāla. Śiva's consort, Bhavānī, is requested to create a wife for this being. She creates a beautiful woman, called Bhavītavatā, and the couple is married by Bhavānī. From their union a host of evils arises, wild beasts, demons, diseases, etc. After some time, Kāla becomes so arrogant as to want to kill the great gods. In order to stop him, a serious disease is sent to attack him, from which he is only freed after praising Śītalā. It is said that everyone who praises Śītalā in the same way, by reciting the *Śītalāṣṭaka*, will obtain freedom from fear of disease. The stotra in praise of Śītalā (6.75–82) is identical with that found in the *Bhāvaprakāśa*.

Unfamiliar names of diseases found in the *Arkaprakāśa* are loharoga (1.45), mahārṭi (a children's disease; 7.88), mṛtarakta (6.28), and piṅgameha (10.29). Noteworthy names of children's diseases caused by demons are kaṇikara, śoṇaka, koṇa or sakoṇa, and kaṭhina (5.14). Some uncommon names of bālagrahas are Veṇī, Yeṇī, Kukkurā, Raktasārikā, Prabhūtā, Tvaritā, and Rātri (5.15).

The materia medica of the *Arkaprakāśa* presents numerous unusual substances; part of these betray a Muslim origin. Some of the more important are: amlapatrī (9.17),⁹⁷² bājari (9.33),⁹⁷³ biḍālakaṇṭaka (8.36),⁹⁷⁴ cambelī (4.36; 8.35),⁹⁷⁵ candra-sūra (3.13; 4.12; 9.59),⁹⁷⁶ dakṣiṇā doḍī (9.40),⁹⁷⁷ dārucinī (4.21),⁹⁷⁸ dārucīrṇaka (4.6),⁹⁷⁹ gaṇeśapriya (8.80),⁹⁸⁰ gauḍapatrī (9.85), gaurīphala (9.23),⁹⁸¹ gorohiṇī (9.61),⁹⁸² gulāba (9.76),⁹⁸³ guladāvadī (4.36 and 99),⁹⁸⁴ guruhelī (8.43), gururohiṇī (9.61), haṃsahelī (8.1),⁹⁸⁵ jalaśīrṣaka (9.57), kṣīravārāhikā (4.26), kuhundarā (3.97), liṅgaḍaṇḍa (9.37), peṭhaka (2.92),⁹⁸⁶ revacīnī (9.56),⁹⁸⁷ sannāha (9.56),⁹⁸⁸ and śauriṇī (2.18).⁹⁸⁹

No particulars are known about the authorship of this work.⁹⁹⁰ P. Hymavathi suggests that the author, Rāvaṇapaṇḍita, may be a son or disciple of Bhāvamīśra, because of the close resemblance between many verses of the *Arkaprakāśa* and the *Bhāvaprakāśa*.⁹⁹¹

The mention of phirarigarga and the occurrence of the *Śītalāṣṭaka* make it possible to conclude that the *Arkaprakāśa* has been composed after the age of Bhāvamīśra. The description of a distilling apparatus and a number of items from the materia medica⁹⁹² are in favour of placing it in the seventeenth century or later.⁹⁹³ Kāñcīnātha's quotation

from the *Arkaprakāśa* in his commentary on the *Ratirahasya* is of no avail, because the date of this author is unknown.⁹⁹⁴

RĀYASIMHA: *Rāyasīṇhotsava* or *Vaidyakasārasaṃgraha*.⁹⁹⁵

REVAṆASIDDHA:⁹⁹⁶ (1) *Vīrabhaṭṭīya*; (2) *Revaṇasiddhakalpa*.

(1) *Vīrabhaṭṭīya*⁹⁹⁷ or *Āyurvedasāra*.⁹⁹⁸ This work⁹⁹⁹ consists of 244 verses, arranged in five chapters. The subjects dealt with are: (1) a description of the mythical prototype of a physician;¹⁰⁰⁰ a list of medical authorities and works; patients to be treated and to be rejected; the types of country (*deśa*); the *doṣas*, the tastes, and their interrelations; anatomy; (2) the classification of diseases; *karmavipāka*; (3) the effects of the ten kinds of *vāyu*¹⁰⁰¹ when vitiated, and of the other *doṣas*; (4) the examination of the pulse; (5) *aṣṭādaśas*; *piṇḍavardhanavidhi*; *puruṣa-* and *strīlakṣaṇa*; *yugalajñānalakṣaṇa*.¹⁰⁰² One of the MSS¹⁰⁰³ has a sixth chapter of 120 verses, concerned with *ṣoṇitavāta*, *dhanurvāta*, the names of eight *rasas*,¹⁰⁰⁴ fevers, fasting in fevers, the digestive fire, *prasūtivāta*, and some other, unconnected, subjects.

Authorities and works found in the list of chapter one are: *Āśvīneya*, *Bāhaṭa*,¹⁰⁰⁵ *Bheṣajakalpa*, *Candrajñāna*,¹⁰⁰⁶ *Caraka*, *Cūḍāmaṇi*, *Dāmodara*, *Indrasata*(?), *Kalyāṇa*, *Kalyāṇakāraka*, *Kāpālin*, *Kārmukhi*(?),¹⁰⁰⁷ *Kṛṣṇeya*, *Mahāstra*(?), *Nāgārjuna*, *Nandinātha*,¹⁰⁰⁸ *Pārijāta*, *Rasadarpaṇa*, *Rasaputra*,¹⁰⁰⁹ *Rasāmava*, *Rasendra*, *Sadyadi*(?), *Śākhara*,¹⁰¹⁰ *Samgraha*, *Śākteya*, *Śārīra* *Somanātha*, *Somaparita*(?), *Sūtārāja*,¹⁰¹¹ *Sūtrasthāna*, *Vaśiṣṭha*, *Vibhra*(?), *Vīrabhaṭṭaka*, *Yamala*, and *Yuṣmini*.¹⁰¹²

This list demonstrates the influence of *rasaśāstra* and Tantrism on the *Vīrabhaṭṭīya*.

(2) *Revaṇasiddhakalpa*,¹⁰¹³ a treatise about mantras, yantras, and *rasāyana*.¹⁰¹⁴

Revaṇa was a Śaiva, who established a Śaivapīṭha in Kolanupāka (Āndhradeśa). This centre is supposed to have been shifted by him later to Balekonnur (Karṇāṭaka).¹⁰¹⁵

SADĀNANDA: *Śārīraviveka*.¹⁰¹⁶

SĀGĪ: *Vaidyavinoda*.¹⁰¹⁷

ŚĀLAGRĀMA: *Dhanvantari*.¹⁰¹⁸ This work is one of the sources of the *Rasayogasāgara*.¹⁰¹⁹

ŚĀLIGRĀMAPAṆḌITA: *Vīravaidyaratnākara*.¹⁰²⁰

ŚĀMA: (*Sāra*)*saṃgrahatarāṅgiṇī*, a manual of therapeutics and dietetics in twenty-three chapters (*taraṅga*). The *Yogatarāṅgiṇī* is referred to as a source.¹⁰²¹

ŚĀMADATTAPAṆḌITA: *Yogeśvara*.¹⁰²²

SAMANTABHADRA: Ugrāditya declares in his *Kalyāṇakāraka* (20.86) that his work is a shortened version of an extensive treatise on the eight limbs of *āyurveda* by Samantabhadra.¹⁰²³

A partially preserved medical treatise, the *Siddhāntarāyanakalpa*, is ascribed to Samantabhadra.¹⁰²⁴ This work, said to have contained 18,000 verses, shows the influence of a Jain koṣa, the *Vaidyakanighaṇṭu* by Amṛtanandin, in which the names of many medicinal plants are replaced by synonyms connected with Jainism, such as ṛ-ṣabhā = āmalaka, vardhamāna = śvetairāṇḍa, vardhamānā = madhuramātuluṅga, vī-tarāga = āmra.¹⁰²⁵ A *Puṣpāyurveda*, now completely lost, is also attributed to him.¹⁰²⁶

The date of the medical author Samantabhadra is unknown. The famous Jain author of the same name is assigned to the second century,¹⁰²⁷ the first half of the fifth century,¹⁰²⁸ about A.D. 450 (?),¹⁰²⁹ fifth or sixth century,¹⁰³⁰ A.D. 600,¹⁰³¹ or the first half of the eighth century.¹⁰³²

ŚAMBHU: *Kālaḥjñāna*.¹⁰³³ The chapter headings and the extent of the treatise differ considerably in the MSS.¹⁰³⁴

The text of one of the MSS¹⁰³⁵ consists of seven chapters (samuddeśa), dealing with: (1) kālaḥjñānavicāra, (2) jīvitalakṣaṇa, (3) mṛtyulakṣaṇa, (4) nāḍīlakṣaṇa, (5) jvaralakṣaṇa and jvarotpannavivaraṇa, and (7) jvaracikitsā.

Another MS¹⁰³⁶ contains 128 verses, arranged in five chapters (samuddeśa): (1) general precepts, (2) curable diseases, (3) incurable diseases, (4) nāḍī, (5) the treatment of fevers. Two additional chapters on nāḍī- and mūtraparīkṣā are said to be borrowed from the *Śārīḡadharasamhitā*.

A third MS¹⁰³⁷ is complete in 177 verses, arranged in six chapters: (1) kālavivaraṇa, (2) jīvitalakṣaṇa, (3) svara-, śarīra-, and nakṣatralakṣaṇa, (4) dvādaśajvaranidāna, (5) nāḍīparīkṣā, and (6) mūtraparīkṣā.

One of the MSS of the Bodleian Library, Oxford,¹⁰³⁸ has seven chapters: (1) and (2) title unknown, (3) svara-, gati-, mṛtyu-, nakṣatralakṣaṇa, (4) jvaralakṣaṇa, (5) and (6) mūtraparīkṣā, and (7) nāḍīparīkṣā. Another MS of the Bodleian Library¹⁰³⁹ quotes the *Rasaratnākara*, *Yogarātnāvalī* and other sources. Other MSS again describe nāḍī-, mūtra-, doṣa-, and viṣparīkṣā,¹⁰⁴⁰ and even aṣṭasthānaparīkṣā.¹⁰⁴¹

The introductory stanzas of the *Kālaḥjñāna* usually mention that it is accompanied by a *Kālā*, probably a commentary.¹⁰⁴²

The *Kālaḥjñāna* was rendered into Rājasthānī verse by Lakṣmīvallabha, a Jain monk of the Kharataragaccha, in A.D. 1684/85.¹⁰⁴³

A *Kālaḥjñāna*¹⁰⁴⁴ is quoted or referred to in a *Bālācikitsā*,¹⁰⁴⁵ Vācaka Dīpacandra's *Laighanapathyanirṇaya*, Karandīkar's *Nidānadīpikā*, Meghamuni's *Meghavinoda*,¹⁰⁴⁶ and Nayanasukha's *Vaidyamanotsava*.

The quotation by Nayanasukha, whose *Vaidyamanotsava* was completed in 1592, establishes the terminus ante quem of the *Kālaḥjñāna*. The presence of mūtra- and nāḍīparīkṣā among its contents shows it to be later than Vaṅgasena, respectively Śārīḡadharā.¹⁰⁴⁷ The reference to aṣṭasthānaparīkṣā in one of the MSS¹⁰⁴⁸ proves that at least this version of the *Kālaḥjñāna* cannot be earlier than about 1500.¹⁰⁴⁹

One of the edited versions of Śambhu's *Kālaḥjñāna*,¹⁰⁵⁰ consisting of about 130 verses and some prose, gives clear evidence of Tantric influences.

The opening verse refers to Śambhu as the one who expounded the knowledge concerning time (kālaḥjñāna). The treatise proceeds with describing the power of time

which ultimately destroys all living beings, even the gods (2–10). The four basic needs (vāñchā) of a human being (food, drink, sleep and sex) are mentioned (11), followed by descriptions of the six cakras, sixteen ādhāras, three lakṣas and five types of vyoman (12–23).¹⁰⁵¹ Then follow some verses (24–28), quoted from the *Svarodaya*, which are concerned with breathing through the nose and abnormal types of this breathing which are indicative of the approach of death within a specified period of time. The next verses (29–34), probably also borrowed from the *Svarodaya*, describe some ariṣṭas characterized by the inability to perceive particular nakṣatras, and abnormal perceptions, especially with regard to the reflections of the sun and the moon in water. Some verses (35–40), partly taken from the *Carakasamhitā* (I.2.3–6), are about ariṣṭas in general. The next part of the treatise is arranged in three chapters, called respectively pañcendriyārthavipratipatti (41–60), chāyāvipratipatti (61–90), and svabhāvavipratipatti (91–116), in agreement with three chapters of the *Suśrutasaṃhitā* (Sū.30, 31, 32). This part describes ariṣṭas in verse and some prose, largely borrowed from the *Suśrutasaṃhitā*¹⁰⁵² and *Carakasamhitā*.¹⁰⁵³ The work ends with verses on chāyāpuruṣalakṣaṇa (122–134), here said to derive from Śambhu, which are also found in Trimalla's *Yogatairaṅgiṇī* (14.1–11) and *Bṛhadyogatairaṅgiṇī* (44.30–40), where they are quoted from the *Śivāgama*.

A *Samnipātakalikā* is also attributed to Śambhu.¹⁰⁵⁴

ŚAMKARAKAVI: *Vṛttisaṃkhyānidāna*.¹⁰⁵⁵

SANĀMAKARAṆA, son of Purovikaraṇa(?): *Agadārājatantra*.¹⁰⁵⁶

SANATKUMĀRARAHASYA: *Anubhogakalpaka*, in twelve chapters (prakaraṇa), on the properties of drugs.¹⁰⁵⁷

ŚĀNTAPPA: *Akalaṅkasaṃhitā*.¹⁰⁵⁸

SARVAHITĀMṚTADATTA: *Brahmavedasārāṅgadharacakra*.¹⁰⁵⁹ This work forms part of the Tibetan Tanjur under the title of *Chais-paḥi rig-byed rgya-mchoḥi yan-lag hjiṅ-pa g-yo-ba-can*. It was collected by Dar-mo sman-rams-pa blo-bzaṅ chos-grags¹⁰⁶⁰ and translated in the Potala into Tibetan by Raghunātha, an Indian physician from Mathurā,¹⁰⁶¹ and Lhun-grub.¹⁰⁶²

SAUDĀSAPUTRA: *Vaidyamanotsava*.¹⁰⁶³

SĀYAṆA: *Sārṇīya*.¹⁰⁶⁴

ŚEṢARĀJA: *Śeṣarājanighaṇṭu*.¹⁰⁶⁵

SĪTĀRĀMA ŚĀSTRIN: *Śākanighaṇṭu*.¹⁰⁶⁶

SĪTĀRĀMA SOMANĀTHA: *Vaidyasāra*.¹⁰⁶⁷

ŚIVA is the reputed author of several works. (1) (*Auṣadhi*)*kalpalatā*.¹⁰⁶⁸ (2) *Āyurveda*, a treatise in the form of a dialogue between Śiva and Pārvatī.¹⁰⁶⁹ (3) *Bālatantra* or *Cikitsākalikā*.¹⁰⁷⁰ (4) *Indrajāla*,¹⁰⁷¹ a short Tantric treatise on ṣaṭkarman. As usual in such a work, subjects dealt with are: making a woman infertile, curing infertility, preventing

abortion and stillbirths, promoting potency in males, etc. This treatise cannot be earlier than the seventeenth century, since Kṛṣṇānanda Vidyāvāgīśa's *Tantrasāra* is mentioned as one of its sources. (5) *Śalyatantra*.¹⁰⁷² (6) *Śārīrakasūtrasthāna*.¹⁰⁷³ (7) *Udakalakṣaṇa*.¹⁰⁷⁴ (8) *Nāḍivijñānīya*.¹⁰⁷⁵

ŚIVACANDRA: *Vaidyakasāra*.¹⁰⁷⁶

ŚIVADĀSA: (1) *Pathyāpathyādhikāra*;¹⁰⁷⁷ (2) *Sārāvalī*;¹⁰⁷⁸ (3) *Yogasāra* (*samuccaya*).¹⁰⁷⁹

ŚIVA DULĀRE: *Pathyāpathya*.¹⁰⁸⁰

ŚIVADVIJA: *Śivasādhaka*.¹⁰⁸¹

ŚIVĀNANDABHAṬṬA GOSVĀMIN: *Vaidyaratna*.¹⁰⁸²

ŚIVAPRASĀDA: *Prastāvasaṃgraharatnākara*.¹⁰⁸³

ŚIVARĀMA, a Siddha: *Siddhasārakhaṇḍa*.¹⁰⁸⁴

SOMANĀTHA: *Kalyāṇakāraka*.¹⁰⁸⁵

SOMANĀTHA MAHĀPĀTRA: *Vaidyaśaṃkṣiptasāra*.¹⁰⁸⁶

SOMAYA: *Bhīṣagvarāṇjana*, written in Telugu, in the form of a dialogue between Dhānvanṭari as the teacher and Agastya as his pupil. Sources mentioned are the *Divyacinṭāmaṇi*, *Rasapradīpikā* and *Bāhaṭa*. This work may date from the first half of the seventeenth century.¹⁰⁸⁷

ŚRĪDHARADEVA: *Vaidyāmṛta*.¹⁰⁸⁸

ŚRĪDHARA (MIŚRA): (1) *Vaidyamanotsava*;¹⁰⁸⁹ (2) *Vaidyāmṛta*.¹⁰⁹⁰

ŚRĪGUMĀDĪŚA: *Sārasaṃgraha*.¹⁰⁹¹

ŚRĪKĀNTADĀSA: (1) *Vaidyavallabha*;¹⁰⁹² (2) *Paribhāṣā*.¹⁰⁹³

ŚRĪKĀNṬHANANDANA of Bodhi village: *Paryāyamañjarī*, a medical lexicon.¹⁰⁹⁴

ŚRĪKĀNṬHAPAṆḌITA:¹⁰⁹⁵ *Yogarātnāvalī*,¹⁰⁹⁶ a treatise of Tantric inspiration, in nine chapters (paṭala or pariccheda) with a total of 2,500 verses.¹⁰⁹⁷ It deals with Tantric subjects, medicine, cures for poisoning, measures counteracting afflictions caused by demons, etc.

The titles of the chapters are: samastaviṣanigraha (verses 1–242), bhūtagrahaśākinīnāṇi jvaranigrahaḥ (243–440), saṃhitasādhikakarmādhikāra (441–1077), kautukādhikāra (1078–1589), vaidyādhikāra (1590–2198), rasāyanavidhi (2199–2346), ratnādirīkṣādhikāra (210 verses), kālajñānavidhi (seventy-one verses), and auśadhakitsāprakaraṇa (44 verses; extracted from Nāgārjuna's *Kakṣapuṭa*).¹⁰⁹⁸

The *Yogarātnāvalī* enumerates twelve treatises on poisons (viṣatantra):¹⁰⁹⁹ *Paṅkṣirāja*,¹¹⁰⁰ *Śikhāyoga*,¹¹⁰¹ *Bindusāra*, *Śikhāmṛta*,¹¹⁰² *Tottala*,¹¹⁰³ ... *kūṭa*, *Kṛtsnāṅga*,¹¹⁰⁴ *Tottalottara*,¹¹⁰⁵ *Kaṭāha*,¹¹⁰⁶ *Chāgatunḍa*,¹¹⁰⁷ *Sugrīva*,¹¹⁰⁸ and *Karkaṭāmukha*.¹¹⁰⁹

An unspecified *Yogarātnāvalī* is quoted or referred to in a number of medical and other treatises: Basava's *Śivatattvaratnākara*, Guṇrājśatnamīśra's *Viśikhānupraveśavijñāna*, Jñārasarāma's version of the *Amṛtasāgara*, Kalyāṇadāsa's *Bālatantra*

(according to Vācaka Dīpacandra), the *Kautukasāroddhāra*, *Pākamārtanḍa*, *Ratnākaraśaṣṭhaśāstragrantha*, *Śārṅgadharaṣṭhaśāstragrantha*, *Ṭoḍara's Āyurvedasaukhyā*, *Trimalla's Yogataraṅgiṇī* and *Brhadyogatarāṅgiṇī*, the *Vīrasīṃhāvaloka*, and the *Yogaratanākara*.

Evidence on the identity of the Śrīkaṇṭhaṇḍita who wrote the *Yogaratanāvalī* is not available.

P. Hymavathi,¹¹¹⁰ however, does not hesitate to regard him as the philosopher Śrīkaṇṭha, who wrote a famous commentary on the *Brahmasūtra*.¹¹¹¹ P. Hymavathi gives the following information:

Śrīkaṇṭhaṇḍita was a great scholar in many fields, more popular as a Śaiva philosopher than as a medical scientist. A number of famous men belonged to his circle of students. Among these are: Mādhava Vidyāraṇya, Sāyaṇa and Bhogaṇātha, as well as the medical writer Naraharipaṇḍita, also called Nṛsiṃhaṇḍita.

Śrīkaṇṭha was the guru of Saṅgama II of the Vijayanagar dynasty,¹¹¹² who mentions him as such in one of his grants.

Śrīkaṇṭha's place of residence was, according to some, the Āmardhakapīṭha of Kāleśvaram, situated in the present Karimnagar district; others are convinced that he lived in Śrīkālahasti.¹¹¹³ Inscriptions referring to him are found in the Nellore¹¹¹⁴ district.

P. Hymavathi assigns Śrīkaṇṭha to the period A.D. 1300–1360.¹¹¹⁵

ŚRĪKAṆṬHAŚARMAṆ: *Jīvaraṣāṃṛta*.¹¹¹⁶

ŚRĪKAṆṬHAṆḍITA, also called Śrīkaṇṭhasūri, was the author of the *Hitopadeśa*.¹¹¹⁷

The treatise consists of about 1,050 verses, arranged in ten chapters (*śamuddeśa*).

Chapter one (2) enumerates the eight items of *aṣṭasthānaparīkṣā*,¹¹¹⁸ but describes in detail five forms of *parīkṣā* only. More than half of the chapter (3–83) is devoted to the examination of the pulse (*nāḍīparīkṣā*). The wrist is said to be the chief place for this examination, but information on particular groups of diseases can be collected by feeling the pulse elsewhere: the pulse of the feet and ankles indicates disorders of the lower part of the body (9), the *nāḍī* of the umbilical region, called *bodhinī*, informs about diseases like *udara*, *arśas* and *bhagandara* (12–13), etc. Among the places to be examined is also the *brahmarandhra* (11). Twenty-four *nāḍīs* are said to transport the three *doṣas* (16–17); *Idā* conveys in particular *vāta*, *Pīṅgalā* *pitta*, and *Suśumṇā* *kapha* (23).¹¹¹⁹ The usual subjects of a treatise on *nāḍīparīkṣā* are covered: the characteristics of the pulses of the *doṣas* when normal and out of balance (20–41), the pulses in particular diseases (42–51), signs indicating incurability or death within a specified period of time (52–79), etc.¹¹²⁰ The second subject of chapter one is the examination of the urine (*mūtraparīkṣā*; 84–123). The characteristics of the urine in disorders of the *doṣas* are described (87–92), the examination by means of a drop of oil (*tailabindu*; 93–98), the characteristics of the urine in a series of diseases (101–113),¹¹²¹ the prognostic meaning of the direction in which the drop of oil spreads on the surface of the urine (114–120),¹¹²² prognostication by adding ashes to the drop of oil (121), and the prognostic meaning of the form assumed by the drop of oil (122–123).¹¹²³ The examination of the eyes (*netraparīkṣā*; 124–132),¹¹²⁴ face (*mukhaparīkṣā*; 133–134),¹¹²⁵ and tongue (*jihvāparīkṣā*; 135–138)¹¹²⁶ is also dealt with, but verses on *mala*-, *śabda*-, and

sparsāparīkṣā are absent.

Chapter two has some verses on the actions of the three doṣas (2–4), but is mainly concerned with the origin, symptoms and treatment of various types of fever (6–90; 102–104) and with the treatment of jvarātisāra (91–93). Chapter three is about diseases of the head (1–18), ears (19–25),¹¹²⁷ nose (36–50),¹¹²⁸ mouth,¹¹²⁹ teeth and lips (51–79), and throat (80–105).¹¹³⁰ Chapter four is about diseases of the eyes (1–104), and about nidrā and tandrā (105–109). Chapter five deals with the seven disorders located in the cardiac region: kāsa (2–14), śūla (15–53), udhvasī (54), kṣayaroga (55–73),¹¹³¹ gulma (74–87), hikkā (88–94), and hrdroga (95–99). Chapter six is about the six abdominal diseases: chardi (2–14), udara (15–30), śvāsa (31–37), plīhan (38–44), particular forms of śūla (51–56), and ahijambuka (1),¹¹³² and about the six disorders of the urinary tract: prameha (61–71), mūtrakṛcchra (72–81), nararoga (82–90),¹¹³³ mūtraśārkara (91–99), mūtrarodha (100–107),¹¹³⁴ and uṣṇavāta (108–109).¹¹³⁵ Chapter seven is concerned with kuraṇḍa (1–15),¹¹³⁶ arśas (16–33), atisāra (34–62), grahaṇī (63–81), and the five diseases of the legs (pādaroga): ślīpada (83–84), ringiṇivāta (85–87), ūrustambha (88–91), vicarcikā (92–95), and turvala (82).¹¹³⁷ Chapter eight deals with lūtā (1–30), bhagandara (31–36), jvālāgadabha (37–41), visphoṭa (42–45), govāra (46), śītālā (47–49), and śōpha (50–72),¹¹³⁸ chapter nine with kuṣṭha (1–56) and vātaroga (57–98), and chapter ten with bālaroga (1–27), strīroga (28–59), vraṇa (60–66), nāḍīvraṇa (67–77), visarpa, raktamaṇḍala, kaṇḍū and dadru¹¹³⁹ (78–84), arbuda (85–87), raktapitta (90–92), pāṇḍuroga (93–97), apasmāra and unmāda (98–104), agnimāndya (105–110),¹¹⁴⁰ agnidagdha (111–112), viṣa (113–119), and granthi (120).¹¹⁴¹

The *Hitopadeśa* is written in an easy style. The arrangement of the diseases as found in this text has no parallels elsewhere. The tridoṣa theory has a very important place, as appears from the description of the doṣic types of numerous diseases.¹¹⁴² Some generally recognized diseases are not mentioned at all, e.g., arocaka, mūrchā, pānātyaya, āmavāta, udāvarta, ānāha, medoroga, vidradhi, bhagna, śītapitta, amlapitta, and the majority of the kṣudrarogas. Diseases like somaroga, phiraṅgaroga, etc., are absent as well. The symptoms of an illness are usually described prior to its therapy.¹¹⁴³

The recipes are simple for the larger part; a few only are more complicated and provided with names.¹¹⁴⁴ Rasayogas are not found in this treatise and mercury (pārada) is mentioned once only (3.13); opium and Cannabis are not prescribed. Religious elements are almost absent from Śrīkaṇṭha's therapy,¹¹⁴⁵ even in the treatment of śītālā.

Sources are hardly mentioned; Śrīkaṇṭha refers to a *Śivamata* (1.80)¹¹⁴⁶ and to Śambhudeva (8.30).¹¹⁴⁷

Śrīkaṇṭhasūri's *Hitopadeśa* is one of the sources of the *Rasayogasāgara*. The *Hitopadeśa* is quoted in Ananta's *Pratāpakalpadruma*, Vācaka Dīpacandra's *Laighanapathyanirṇaya*, and Meghamuni's *Meghavinoda*.¹¹⁴⁸ A *Vaidyakasārasaṃgraha* (probably identical with the *Hitopadeśa*) is cited by Meghamuni. Śrīkaṇṭha is quoted in the *Prayogāmṛta*, Śrīkaṇṭhaśambhu in the *Śārṅgadharapaddhati*.¹¹⁴⁹

The *Hitopadeśa* presents a large number of noteworthy features in the field of nosology. The following eight types of fever are enumerated: caused by vāta, pitta, kapha, saṃnipāta, abhicāra, devaprakopa, grahaprakopa, and an eighth one of mental

origin (mānasa) (2.7).¹¹⁵⁰ Two irregular fevers are added to the usually mentioned series: a type recurring every fifth (pañcamaka; 2.81) and one recurring every sixth day (ṣaṣṭhadinodbhava; 2.83).¹¹⁵¹

Names of diseases occurring in this work only are: ahijambuka (6.1), bāla (7.87),¹¹⁵² chalikā (3.36),¹¹⁵³ dhīmaḍa (10.82),¹¹⁵⁴ govāra (8.46), khasara (10.79),¹¹⁵⁵ nālagulma (6.57–59), turvala (7.82), and udhvasī (5.1 and 54; 9.88).¹¹⁵⁶ The term ghūrmī (4.107) is employed as a synonym of tandrā; kaṭigṛdhra (6.54–55) may be a synonym of kaṭisūla. The term riṅgiṇivāta (7.82 and 85–86) denotes the disorder commonly known as grḍhrasī.¹¹⁵⁷ The disorder called uṣṇavāta, usually regarded as a variety of mutrāghāta, is separately mentioned (6.60 and 108–109).¹¹⁵⁸

The verses on lūtā¹¹⁵⁹ are interesting. Four doṣic groups of lūtā are distinguished, subdivided into a number of types, each one having its own name and location. The members of the vāta group are: śvetā, located on the right hand; kṛṣṇakarī, on the left hand; kapilā, on the nose; pītā, on the chin; trimanḍalā, on the right half of the body; vāmāṅgabhedinī, on the left half; viṣā, on the right shoulder; viṣāpahā, on the left shoulder; tāmravarṇā, on the kṛkātikā.¹¹⁶⁰ The members of the pitta group are: kasanā, on the right hand; raktavati, on the left hand; vīrakṣetragavā, on the right half of the body; mecakā, on the left half; karkaṭī, on the right side of the chest; piṅgalā, on the back. The kapha types are: raktā, on the right ear; pāṃṣuvarṇikā, on the left ear; asitā, in the left armpit; sitā, in the right armpit; śyāmā, on the right side of the abdomen; śritā and udarā,¹¹⁶¹ on the left side of the abdomen; varadā, in the umbilical region; jaladā and ambukā,¹¹⁶² on the tongue. The saṃnipāta types are: mālāṅgulī, on the head; tālukarṇikā, on the forehead; kālakarṇī, between the eyebrows; jaladā, on the tongue; manīpatnī, on the palate; taptavarṇikā, when hikkā is present; vaidehī, in the pharynx; vahnīkarṇikā, in the cardiac region.

The disease called jvālāgardabha¹¹⁶³ (8.37–39) is also divided into a number of types according to its location. These types are: gaura, on the back; piṅgalā, on the head; kṛṣṇāśya, in the cardiac region; saumyadrś, on the nose; kalahapriya, on the legs; vijaya, on the hands; kumbhakarṇa, on the buttocks; kapilā, on the lateral parts of the abdomen; priyadarśana, on the chest. The group of diseases called kuṣṭha is divided into six (9.2–5) or the usual eighteen types (9.6–8). Ten kinds of vāta are distinguished and their actions described (9.58–65). Tennādīs, in which these ten kinds are supposed to circulate, are mentioned by name:¹¹⁶⁴ Idā, Piṅgalā, Suṣumṇā, Hastijihvikā, Alañmukhā,¹¹⁶⁵ Yaśā,¹¹⁶⁶ Mūṣā,¹¹⁶⁷ Kandhārī,¹¹⁶⁸ Śikhinī,¹¹⁶⁹ and Kuḥū (9.66–67).

Noteworthy names of medicinal plants are: bhūjayantī (10.73), devaṅgarī¹¹⁷⁰ (6.64 and 68), dullarī (2.75; 3.33; 4.105; 5.34 and 38; 6.31; 7.68), karṇamotā (10.69), kāsulī (2.26, 27, 39, 56), kaṭudugdhikā (7.22),¹¹⁷¹ kaṭutunḍīrikā (4.84),¹¹⁷² kāyaphala (4.36 and 67),¹¹⁷³ laghutulvikā (6.92), manku¹¹⁷⁴ (8.64; 9.26, 29, 35 and 39), paṅgulī (10.37), riṅgiṇī¹¹⁷⁵ (2.52 and 73; 3.31 and 33; 5.34 and 38; 7.56 and 68; 8.64), riṅgiṇikā (2.24), tavakṣīra (5.7; 10.36),¹¹⁷⁶ and tunḍīrī (2.101).

The author's name is Śrīkaṇṭhapāṇḍita (10.122). Variants are Śrīkaṇṭhasūri,¹¹⁷⁷ Śrīkaṇṭhasambhu,¹¹⁷⁸ Śrīkaṇṭhaśivapaṇḍita,¹¹⁷⁹ and Śivapaṇḍita.¹¹⁸⁰ He was a Jain monk, as is apparent from the maṅgala, addressed to Rṣabha, and a number of references to Jainism.¹¹⁸¹ He is called a paramajainācārya,¹¹⁸² and resided in

Siddhapura¹¹⁸³ and Dhūlegārnv.¹¹⁸⁴ Other medical works of his hand are *Bhiṣagbhūṣaṇa* and *Yogapradīpa*.¹¹⁸⁵ He is probably different from the author of the *Yogaratanāvalī*, who was a Hindu.¹¹⁸⁶

Śrīkaṇṭhasūri is said to have lived in the period A.D. 1445–1545.¹¹⁸⁷ Quotations from the *Hitopadeśa* are found in some works from the eighteenth century. One of the MSS dates from 1734/35.¹¹⁸⁸

ŚRĪKṚṢṆARĀYA: *Siddhayogasamuccaya*.¹¹⁸⁹

ŚRĪNĀTHA, son of Ghāṣīrāma: *Jagatprakāśa*.¹¹⁹⁰

ŚRĪNIDHI: *Bhāvasāra*.¹¹⁹¹

ŚRĪNIVĀSA was the author of the *Cikitsātilaka*.¹¹⁹² a comprehensive textbook of medicine, based on Vāgbhaṭa's *Aṣṭāṅgahṛdayasamhitā*.

The work¹¹⁹³ consists of 130 chapters (adhyāya), arranged in five sections: sūtra- (forty chapters), śārīra- (ten chapters), nidāna- (sixteen chapters), cikitsita- (twenty-four chapters), and uttarasthāna (forty chapters). The subjects of all the chapters are enumerated in a table of contents at the beginning of the work (1.27–43ab). This table shows that the author modelled his work on the *Aṣṭāṅgahṛdayasamhitā*.

The sūtrasthāna, which will be discussed below, has ten chapters more than the parallel section of Vāgbhaṭa's work. The śārīrasthāna has four chapters more; three of these have been added: saṃbhogasādhana (chapter one), garbhanipīḍana (chapter three), and vandhyāviṃśāna (chapter four), while Vāgbhaṭa's chapter six was divided into two, one on dreams (chapter nine), the other on messengers (chapter ten). The order of the chapters of the nidānasthāna agrees exactly with that of Vāgbhaṭa's work, and the same applies to the uttarasthāna. The cikitsitasthāna has two extra chapters at its beginning: (1) ruṇnivr̥tti, (2) pathyakrama.

More details are available only on the sūtrasthāna, since the remaining sections have not been preserved.¹¹⁹⁴

This sūtrasthāna is a re-arrangement of the matter contained in the same section of Vāgbhaṭa's work, with a number of additions. The order of Vāgbhaṭa's chapters one to fourteen was changed, and four chapters (four to six and nine) were added, although their contents are not new, being borrowed from the *Aṣṭāṅgahṛdaya*. The sequence of the remaining chapters is basically the same in both sūtrasthānas. The *Cikitsātilaka*, however, has six chapters more (twenty-three to twenty-five and twenty-seven to twenty-nine), the contents of which, as well as their titles, are closely related to the six chapters of Vāgbhaṭa's kalpasthāna. The advantage of the incorporation of the kalpasthāna at an appropriate place in the sūtrasthāna is that all the aspects of pañcakarma are dealt with together, and not scattered over two sthānas.

Although Śrīnivāsa does not mention Vāgbhaṭa as his main source,¹¹⁹⁵ by far the greater part of the sūtrasthāna of the *Cikitsātilaka* is a slightly shortened and re-arranged version of that of Vāgbhaṭa's work. New material is sparsely represented. It is found in an appendix (parīśiṣṭa) of 187 verses, added to chapters twelve and thirteen on dina- and ṛtucaryā, and concerned with betel chewing, fragrant substances, articles of clothing, etc., making it thus resemble Bhoja's *Cārucaryā*.¹¹⁹⁶ Some new

verses occur in chapter fifteen (on liquids); chapter sixteen (on articles of food and drugs) has an udyānavarga of forty verses on horticulture inserted.¹¹⁹⁷

The *Cikitsātilaka* is not quoted in later works.

The name of the author is Śrīnivāsa or Aijaśrīnivāsa, of Kauśikagotra and Ārvela family, son of Raghunāthārya, grandson of Aijanāgārya.¹¹⁹⁸ He was a pupil of Pad-danārya, with whom he studied the *Āyurvedakalānidhi*,¹¹⁹⁹ and a devotee of Dattā-treya.¹²⁰⁰

The details of Śrīnivāsa's genealogy point to a southern origin.¹²⁰¹ P. Hymavathi regards Iyija¹²⁰² as Śrīnivāsa's native place. Iyija is situated in the border area of Āndhra Pradesh and Karnāṭaka, in the present Mahbubnagar district.¹²⁰³

There are no clues pointing with any certainty to Śrīnivāsa's date. A. Rahman, who also ascribes the *Ṣaḍraśanighaṇṭu* to him, regards him as anterior to the fourteenth century. P. Hymavathi, pointing to Telugu and Kannaḍa words used by Śrīnivāsa, is of the opinion that he lived during the period of the Vijayanagar kingdom, when Telugu, Kannaḍa and Tamiḷ speaking regions were united. The fact that the author was a Vai-ṣṇava and devotee of Dattātreya is adduced by him as an additional argument. Claiming that the *Cikitsātilaka* quotes a verse from the *Bhāvaprakāśa*¹²⁰⁴ and does not yet contain new substances found in the *Yogarātnākara*, he concludes that Śrīnivāsa must have lived between the last quarter of the sixteenth and the first quarter of the seventeenth century.¹²⁰⁵

ŚRĪNIVĀSA: *Vaidyaśāstradīpikā*.¹²⁰⁶

SUBRAHMAṆYA: *Bāhaṭagrantha*, a treatise in nine chapters (pariccheda), dealing with the following subjects: nidānayoga, kaṣāyayoga, pathyāpathayayoga, tailayoga, ghṛtayoga, lehyavargasaṃpatti, cūrṇavāṭakayoga, auśadhayoga, and rasayoga. The beginning of chapter one refers to aṣṭasthānaparīkṣā. The *Siddhasāra* is mentioned as a source.¹²⁰⁷

Some suppose that the *Bāhaṭagrantha* was written by a Bāhaṭācārya, who was also the author of the *Aṣṭāṅganighaṇṭu*; this Bāhaṭa is regarded as having lived during the last quarter of the thirteenth and the first quarter of the fourteenth century, since references to and quotations from his *Bāhaṭa* are found in the works of other scholars from the middle of the fourteenth century onwards.¹²⁰⁸

Formulae from the *Vāhaṭa* are found in the *Rasayogasāgara*.¹²⁰⁹

The date of the *Bāhaṭagrantha* is important because it mentions aṣṭasthānaparīkṣā, a procedure also found in Cāmuṇḍa's works.¹²¹⁰

The Telugu medical author Somaya relates that he began composing his *Bhi-ṣagvarāṇjāna* after studying the *Bāhaṭagrantha*.¹²¹¹ Muḍumbi Venkaṭācārya, who translated the *Rasapradīpikā* into Telugu,¹²¹² paid obeisance to Bāhaṭa. The author who translated Trimalla's *Śataśloki* into Telugu refers to Trimalla as someone well versed in bāhaṭaśāstra. The physician described in the Telugu work called *Paramayogivilāsamu*, written by Tiruveṅgalanātha, holds the *Bāhaṭapustakamu* in his hand.¹²¹³

The *Bāhaṭagrantha* was translated into Telugu verse by Elakūci Bālasarasvatī, who

lived in the first quarter of the seventeenth century according to P. Hymavathi.¹²¹⁴ B. Rama Rao,¹²¹⁵ who discussed this subject earlier, was more careful and stated that the *Bāhaṭamu* of Bālasarasvatī may be either the *Bāhaṭagrantha* or another work of the same title, which is a Telugu translation of the *Aṣṭāṅgharḍaya*, made, or at least completed by, Liṅgayārya, the pupil of Bālasarasvatī.

Bālasarasvatī lived at the court of Veṅkaṭādrī of Paritāla on the banks of the river Kṛṣṇā, during the last part of the sixteenth century, according to B. Rama Rao.

SUKHALATA: *Āyurveda*.¹²¹⁶

ŚUKADEVA: *Vaidyakalpadruma*.¹²¹⁷

SUKHĀNANDA: *Sukhānandavinoda*.¹²¹⁸

ŚUKRĀCĀRYA: *Ulūkakalpa*.¹²¹⁹

SUNDARA: *Indudīpikā*.¹²²⁰

SUNDARADEVA, son of Govindadeva, pupil of Viśvarūpatīrtha, was the author of several treatises.

(1) *Bhūpālavallabhaor Bhūpacaryā*,¹²²¹ a work on dietetics and pathology. The author seems merely to repeat the precepts of predecessors, frequently interlarding his text with paraphrases and comments. Vāgbhaṭa is occasionally referred to for further details on a particular subject. The work begins with the statement that the rules of conduct to be observed during the six seasons will be dealt with. The first chapter is about the rainy season. It contains a, possibly later inserted, section on wrestling and the training of wrestlers, written in the form of a conversation between Kṛṣṇa and Someśvara. This section, called mallavidyā, has been taken from the *Mallapurāṇa*.¹²²²

(2) *Cikitsāsundara*,¹²²³ (3) *Līlāvatī*, a short treatise on hygiene and dietetics;¹²²⁴ (4) *Yogoktivyekacandra*,¹²²⁵ (5) *Yogoktyupadeśāmṛta*.¹²²⁶

Sundaradeva may well be the son of the Govindadeva who wrote the *Yogoktilīlāvatī*.¹²²⁷

SURAJIT: *Laghunidāna*.¹²²⁸

SUŚEṆA¹²²⁹ was the author of the *Āyurvedamahodadhi* or *Annapānavidhi*.¹²³⁰ The possibility cannot be excluded that the *Annapānavidhi* formed part of a larger *Āyurvedamahodadhi*.¹²³¹

The work of Suśeṇa¹²³² is concerned with dietetics and describes the medicinal properties of foods and drinks, adding the therapeutic effects of physical exercise, rubbing of the feet, chewing betel, and wearing various kinds of clothes.¹²³³ It contains 634 verses in various metres and is divided into a long series of Vargas, devoted to water, dairy produce, oils, prepared foods, fruits, etc. P.V. Sharma supposes it to have been written by a royal physician for use by the king.¹²³⁴

There are no commentaries on this text, though Dāmodara's *Ārogyacintāmaṇi* has erroneously been regarded as such.¹²³⁵

Apart from the *Āyurvedamahodadhi*, some more treatises may have been written by Suśeṇa; other works recorded by Th. Aufrecht are: *Guṇāguṇī*, *Śārīraka*, and *Vṛ-*

ttamāṇikyamālā.¹²³⁶ No information on these works is available.

Suṣeṇa is quoted or referred to in the *Bṛhadrasarājasundara*, the *Haṃsarājanidāna*, the *Paraśurāmapratāpa*,¹²³⁷ Raghunātha's *Bhojanakutūhala*, the *Śāliḡrāmanighaṇṭubhūṣaṇa*, Ṭoḍara's *Āyurvedasaukhya*, and Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*.

Worthy of mention is the description of fruits like amṛtaphala (kṛtānavarga 6), piṇḍakharjūra (phalavarga 39), sindola or sindīphala (phalavarga 40), sirākośātakī (phalavarga 46), suvarṇakadalī (phalavarga 41), and utatī (phalavarga 42),¹²³⁸ vegetables like rājavallī (śākavarga 12), sindhaṇī (śākavarga 38), and vārikaśeru (śākavarga 31), and dishes like various kinds of śikhariṇī (śikhariṇīvarga).

P.V. Sharma mentions a MS of a work by Suṣeṇa, probably the *Annapānavidhi*, in which opium, mica, etc., are described.¹²³⁹

Information on Suṣeṇa as a medical author is not available. Suṣeṇa is known from the *Rāmāyaṇa* as a physician in the army of Rāma, who treated Lakṣmaṇa and could bring the dead to life.¹²⁴⁰ The *Devīpurāṇa*¹²⁴¹ has recorded a Suṣeṇa in a list of sages versed in medicine. Suṣeṇa is also the name of a physician mentioned in Bāṇa's *Harṣacarita*.¹²⁴²

A recipe, called siṃhaṇacūrṇa, is found at the end of one of the MSS of the *Annapānavidhi*.¹²⁴³ If Siṃhaṇa, after whom the formula is called, is identical with the Yādava king of this name (1210–1247),¹²⁴⁴ during whose life Keśava was active, Suṣeṇa is posterior to the first half of the thirteenth century. A terminus ante quem is provided by the *Paraśurāmapratāpa* (first half sixteenth century), which gives a long extract from Suṣeṇa's work,¹²⁴⁵ and Ṭoḍara's *Āyurvedasaukhya* (sixteenth century), which quotes him. The earliest MS known is dated A.D. 1622.¹²⁴⁶ P.V. Sharma's claims that Suṣeṇa is quoted in the *Madanapālanighaṇṭu* (A.D. 1375) and the *Kaiyadevanighaṇṭu* (first half of the fifteenth century). Confirmation of this claim would mean that Suṣeṇa may belong to about A.D. 1350.

SVĀMIKUMĀRA: *Vaidyaśāstra*, a work in verse, with explanations in prose.¹²⁴⁷

ŚYĀMADĀSA: *Paribhāṣāsaṃgraha*.¹²⁴⁸ Some of the subjects dealt with in this work are: mānaparibhāṣā, doṣabalābala, aṣaḍhamānādividhāna, anupānavidhi, tuvarakavṛkṣalaṣaṇa, tajjanmasthānanirūpaṇa, ārdraḍravayamātrā, śuṣkḍravayamātrā, snehapāka, pāradaśodhana, kalkamātrā, and kṣīrapāka.¹²⁴⁹

ŚYĀMADATTA: *Yogeśvara*.¹²⁵⁰

ŚYĀMALĀLA: *Sadyogaratnāvalī*.¹²⁵¹

TELKURĀYA, son of Śīṅgayadeśika of Pulpāka family: *Nidānayogaratnāvalī*,¹²⁵² a work on the diagnosis and treatment of various diseases. The author distinguishes, as usual, four types of ajīrṇa, but calls them dhūma, vidhūma, vispaṣṭa, and rasaśeṣa. Opium (aḥipheṇa) is prescribed against diarrhoea and grahaṇī.¹²⁵³

Some scholars are, on the basis of internal evidence, of the opinion that this work dates from about A.D. 1600.¹²⁵⁴

- TIMMARĀJAKAVI: *Vaidyajīvana*.¹²⁵⁵
 TIRMALĀRYA: *Śāstradīpikā* or *Śāstrādarśa*.¹²⁵⁶
 TIRUVENKAYYAPPA: *Śāstrādarśa*.¹²⁵⁷
 TRIPALLĪBHATṬA: *Taraṅgiṇī*.¹²⁵⁸
 TRIPURĀRI: *Rukpratikriyā*.¹²⁵⁹
 TRIPURĀRIN: *Cikitsāsārasaṃgraha*.¹²⁶⁰
 TRYAMBAKA: *Tryambakacikitsā*.¹²⁶¹

TULASĪDĀSA, son of Vaidya Śrīraṅga of Mūhādāgotra, a resident of Nāgpur: (*Vaidyaka*)*yogasārasaṃgraha*,¹²⁶² a short metrical treatise in four chapters: *vaidyaguṇāguṇa*, *bheṣajākhyānaṣaṭkṛtināḍīmūtramalaparīkṣā*, *rogagaṇanā*, and *bheṣajaparīkrama*.

Sources mentioned are Caraka, Hārīta, Suśruta, Vāgbhaṭa, and *Vaidyasāraka*.¹²⁶³

TUḸḸŪRU ŚARABHARĀJU: *Śarabharājīya*. This work, written in Telugu and influenced by the *Basavarājīya*, may date from the seventeenth century.¹²⁶⁴ TuḸḸŪru's son, Mādhava, completed the treatise left incomplete by his father and wrote a medical work in Sanskrit, called *Gadāsaṃjīvanī*.

- UDAYAṆKARA: *Sārakalikā*.¹²⁶⁵
 UDAYARUCI: *Vaidyavallabha*.¹²⁶⁶

UDDHAVAMIŚRA, son of Himakara: *Vaidyapradīpa*, a work on all the aspects of medicine.¹²⁶⁷

UPĀDHYĀYA of the Śārasvatakula: *Cikitsājñāna*.¹²⁶⁸

UPENDRAMIŚRA: *Bhaiṣajyarasāmṛtasamhitā*.¹²⁶⁹ This work is one of the sources of the *Rasayogasāgara*.

- URAGENDRA BHŪPĀLA: *Parimalapārījāta*.¹²⁷⁰
 VĀDHŪLA RĀMĀNUJA: *Āyurvedadharmasāstra*.¹²⁷¹
 VĀGBHAṬA ĀTREYIN: *Kvāthaśataka*.¹²⁷²
 VAIDYANĀTHA: *Kalyāṇagaṇaratnākara*.¹²⁷³
 VAIDYANĀTHA: *Nirṇayanighaṇṭu*.¹²⁷⁴
 VALLABHADEVA: *Yogamuktāvalī*.¹²⁷⁵

VALLABHENDRA or VALLABHĀCĀRYA or INDRAKAṆṬHAVALLABHĀCĀRYA was the author of the *Vaidyacintāmaṇi*.¹²⁷⁶

The *Vaidyacintāmaṇi*¹²⁷⁷ is divided into chapters called *vilāsa* or *prakaraṇa*.¹²⁷⁸

Edition d gives the text of the first 137 verses, which, after a maṅgala and two stanzas on the author, deal with the following subjects: the contents of the work: *nīdāna*, *lakṣaṇa*, *rasayogāḥ*, *kaṣāyakālḥ* (4); *aṣṭasthānaparīkṣā*: *nāḍī*-, *sparśana*-, *svārūpa*-, *śabda*-, *netra*-, *purīṣa*-, *mūtra*-, and *jihvāparīkṣā* (6–28); *ajīrṇa* (29–31);¹²⁷⁹ fever caused by one or two *doṣas* (32–51); *bhūtajvara* (52–53); *ajīmajvara* (54–55);

abhighātajvara (56–57); aihikajvara (58–63); dvyaīhikajvara (64–65); tryāīhikajvara (66–67); cātūrthika (68–70); pañcāīhikajvara (71–72); pakṣāntajvara (73–74); māsāntajvara (75–76); varṣāntajvara (77–78); sarvakālajvara (79–80); asthigatajvara (81); raktagatajvara (82); māṃsagatajvara (83); saṃnipātajvara (84–89);¹²⁸⁰ tāntrikajvara (90–92); the formula of bhūtabhairavarasa (93–95); a list of eighty vāta diseases (96–105);¹²⁸¹ the symptoms of some of these disorders: pakṣaghāta, pārśvavāta, kampavāta, ūruvāta, sandhivāta, and kikkāṇila (106–112); the symptoms of kṣiṇavāta (113), dhūmākhyavāta (114), rasavāta (115), and dhanurvāta (116); the influence of the nakṣatras on diseases (117–123); recipes against fevers and some other diseases (124–129); karmavipāka (130–135); a recipe (136–137).

Sources mentioned in the introduction are Caraka, Suśruta and *Cakraḍatta*.¹²⁸²

Ed. e, which is complete, is divided into twenty-six vilāsas, mostly subdivided into prakaraṇas (chapters).¹²⁸³

Chapter one deals with aṣṭasthānaparīkṣā (1–4).¹²⁸⁴ The maṇigala is addressed to Śrīnātha, Pārvaṭīnātha, Vāṇīnātha, Sarasvatī, Durgā, Vāṭuka,¹²⁸⁵ and Heramba.

Chapter two deals with: the five elements of rogaviññāna (knowledge concerning diseases): nidāna, pūrvarūpa, rūpa, upaśaya and saṃprāpti (5–6); interactions between diseases (6); a maṇigala to Śiva (6); four fevers are brought about by de gods: jvara, mahājvara, raudrajvara and vaiṣṇavajvara (7); patients suffering from these fevers should recite the names of Rudra, Mahārudra, Mahārudra again, and the two Mahārudras respectively (7); śītajvara as a result of karma (7); the religious treatment of śītajvara (7); eight measures able to cure fever: vedaśravaṇa (Veda study), hitacaraṇa (good conduct), viprasaṃtarpaṇa (feeding brāhmaṇas), kṣṇasmarāṇa (mental recitation of the name of Kṛṣṇa), śubhakarāṇa (auspicious actions), dravyaviśrāṇa (the bestowal of gifts), aśvatthabhramaṇa (the circumambulation of an aśvattha tree), suratanadharāṇa (the wearing of auspicious gems), and dīnasamprakṣaṇa (protection of the distressed) (7); recitation of the names of a number of deities and paying homage to several deities are to be recommended (7); astrological influences and their warding off (7); the onset, prodromes, mythical origin, and varieties of fever (7–8); the characteristics of fever due to vāta, pitta, and kapha (8); the characteristics of fever due to vāta and pitta, vāta and kapha, kapha and vāta, pitta and kapha, kapha and pitta (9);¹²⁸⁶ the characteristics of aṇīrajvara, abhighātajvara (9), bhūtajvara, āhikajvara (10); the varieties of āhikajvara: aikāhika, dvyaīhika, tryāīhika, caturthaka, pañcāhika, ārdhapaṇḍa, pakṣika, and māśika;¹²⁸⁷ these fevers are caused by the three doṣas (10); another series: saṃtata, satata, anyedyuṣka, tṛtīyaka, caturthaka, and cātūrthikaviparyaya (10); fevers reaching the seven dhātus; three days are required for going from one dhātu to the next one (10); the characteristics of the seven fevers staying in rasa, rakta, etc. (10–11);¹²⁸⁸ the characteristics of viṣamajvara, mūrchājvara, śītajvara (11), doṣahetukajvara, antardāhajvara, viṣamaśītalajvara, āmajvara (12); the eight varieties of āgantukajvara (12): grahāveśajvara, auśadhajvara, viṣajvara, jvara caused by bhaya (or bhī), śoka, kopa (or krodha), kāma, and abhicāra (12–13);¹²⁸⁹ factors causative of fever; things to be avoided; unwholesome things; the characteristics of strīsaṅgamadoṣa; the characteristics of viṣamadoṣa and viṣamaśītadoṣa (13), raktajihvaka-, pītajihvaka-, kṣṇajihvaka- and śvetajihvakadoṣa (13–14); these

seven doṣas may continue for seven days or a fortnight; rules for the regimen to be kept on each of the first nine days of a fever; the number of days a fever will take for reaching pāka, dependent on the doṣa(s) involved (14); rules regarding treatment during the early stage (14–15); a second series of characteristics of fever due to vāta, pitta, kapha (15), vāta and pitta (15–16), vāta and kapha, pitta and kapha, and vāta, pitta and kapha, together with their treatment (16); a second series of characteristics of bhūtāveśajvara and abhicārajvara, together with their treatment; the characteristics and treatment of daivaprakopajvara (17); the characteristics and treatment of bhūtijvara (17–18), piśācajvara, gandharvajvara (18), tāndrikajvara, mūrchājvara, pralāpajvara (19), śītalajvara (19–20), svedajvara, kṛmijvara (20), haridrājvara (20–21), kāmajvara, prātaḥkālajvara, madhyāhnajvara (21), sāyarnkālaajvara (21–22), niśājvara, śoṣajvara, vraṇajvara (22), ātapajvara (22–23), svarahinajvara, abhighātajvara (23), āmajvara (23–24), agnimāndyajvara, vamanajvara, hidhmājvara (24), hikkājvara, anidrājvara, kāsajvara, rasagatajvara (25), raktagatajvara, māṃsagatajvara, medogatajvara, asthigatajvara (26), majjāgatajvara, śuklagatajvara,¹²⁹⁰ piṭakājvara (27), sphoṭakajvara, kampajvara, śophajvara (28), ānāhajvara (28–29), trikālajvara, saṇṇipātajvara, purāṇajvara (29), śuṣkajvara, aikāhikajvara, dvyaḥikajvara, tryāhikajvara (30), caturthikajvara, pañcāhikajvara, pakṣāntajvara, māsāntajvara (31),¹²⁹¹ and varṣāntikajvara (32).

The next section of chapter two¹²⁹² deals with āyurvedic preparations and rasayogas against fevers (32–54).

Chapter three¹²⁹³ deals with saṇṇipāta fevers: the characteristics of saṇṇipātajvara in general; the varieties to be distinguished; the symptoms of saṇṇipātajvara with a predominance of vāta, pitta, kapha, vāta and pitta, vāta and kapha, pitta and kapha (55); the symptoms of six saṇṇipāta fevers in which one doṣa is most, one moderately and one least excited; another classification of these fevers with thirteen varieties, seven of which are incurable; the symptoms of each of these fevers; two sets of symptoms of sandhika (56), antaka (56–57), hṛddāha, cittavibhrama, śītāṅga (57), tāndrika (57–58), kaṇṭhakubja; the symptoms of karṇika; the variety of karṇika called karṇamūlaśoṭha; two sets of symptoms of bhugnanetra; the symptoms of raktoṣṭha (58) and raktaṣṭhīvin; two sets of symptoms of pralāpa, jihvaka, and abhinyāsa; the six curable varieties (59); the seven incurable varieties (59–60); the time limit of each of the fevers; the characteristics of dhātupāka and malapāka (60).

The section on treatment (60–74) deals with āyurvedic preparations and rasayogas against saṇṇipāta fevers.

Chapter four¹²⁹⁴ deals with: a maṅgala; the attendants (parivāra) of kṣaya as the king of the diseases; karmavipāka relating to kṣaya (75); prāyaścitta; astrological considerations; śānti measures; the four causes of the disease called yakṣman;¹²⁹⁵ the saṇṇiprāpti of rājayakṣman,¹²⁹⁶ its prodromes (76);¹²⁹⁷ the symptoms of yakṣman due to vāta, pitta, kapha, vāta and pitta, vāta and kapha, pitta and kapha, saṇṇipāta, and blood; the main symptoms of rājayakṣman;¹²⁹⁸ the eleven, six or three main symptoms (77);¹²⁹⁹ signs indicating curability or incurability;¹³⁰⁰ the varieties of śoṣa; the characteristics of śoṣa caused by sexual intercourse, grief, old age, travelling (78), physical exercise (78–79), and injuries;¹³⁰¹ the causes and symptoms

of uraḥkṣata;¹³⁰² signs indicating its incurability;¹³⁰³ cases of śoṣa amenable to treatment or unsuitable to it (79);¹³⁰⁴ a mythical tale about kṣayaroga in the form of a dialogue between Pārvatī and Śiva (79–80); śānti measures (80–81); details concerning the appearance of kṣaya in successive births (81); characteristics of kṣaya in general; the characteristics of raktakṣaya, rājayakṣman, saṃtāpakṣaya (82), mūrchākṣaya, śoṣakṣaya, vamanakṣaya, grahaṇīkṣaya, śophakṣaya (83), śuskakṣaya, atisārakṣaya, mandāgnīkṣaya, pāṇḍukṣaya (84), śūlakṣaya (84–85), kaphakṣaya, kāśakṣaya, śvāsakṣaya (85), tandrākṣaya (85–86), hidhmākṣaya, and haridrākṣaya (86).

The section on treatment (86–108) describes āyurvedic preparations and rasayogas.

Chapters five to nine deal with a number of diseases and their treatment. The descriptions of the diseases largely agree with the *Mādhavanidāna*. Verses on karmavipāka are added. Chapter five is about pāṇḍuroga. Chapter six, on kāmīlā and related disorders, adds that the image of the deity Kāmīlā should be honoured (124). Additional subjects of chapter seven, devoted to śopha, are the characteristics and treatment of this disorder when caused by krtrimaviṣa, and the characteristics and treatment of pāṣāṇadoṣaśopha (132), vṛṇaśopha, jvaraśopha, khaḍgaghātaśopha (133), kāmīlāśopha, sarpadaṣaśopha, and gandhakaśopha (134). Chapter eight, on atisāra and pravāhikā, adds a description of bhasrātīsāra (139–140). Chapter nine, on grahaṇī, adds the characteristics of ghaṭīyantragrahaṇī (155).

Chapter ten,¹³⁰⁵ on vātavyādhi, begins with: a maṅgala; karmavipāka relating to vātavyādhi; general śānti measures; śānti of dhanurvāta, pakṣavāta (168), raktavāta, vātarakta, vātapitta; causes of vātavyādhi according to astrology; the importance of vāta (169).

The part that follows, up to the description of khallī (169–177), has largely been taken from the *Mādhavanidāna*.¹³⁰⁶ Some additional verses describe the organs forming part of the koṣṭha, the location of the āmāśaya (170), jṛṃbhāvāta, pralāpavāta, rasājñāna, tvakśūnyatā (171), four varieties of ākṣepaka, due to vāta, pitta, kapha and a trauma (172), and the varieties of ardita due to vāta, pitta and kapha (174). The characteristics of tūnī and pratitūnī are absent.¹³⁰⁷

The section that follows is concerned with the symptoms of dhūmavāta, vidhūmavāta, śuṣkāṅgavāta, kaphavāta, jihvāṅgavāta, skandhavāta, kandharavāta, pādavāta, madhuvāta (177), bastivāta, kṣutavāta, śṛīkhalāvāta, visphoṭavāta, snāyuvāta, grdhra-vāta, pāṃśuvāta, skhalanavāta, śukravāta, sūtikāvāta, tvagvāta (178), bhogavāta, kikkasavāta, kaṭivāta, malabaddhavāta, mūtrabaddhavāta, ūruvāta, suptivāta, kampavāta, bāhukampa (179), śītavāta, sirāvāta, netravāta, nāsāvāta, mukhavāta, udaravāta, ku-kṣivāta, ajṛṇavāta, amlavāta, anulomavāta, vilomavāta (180), dhanurvāta, pakṣaghāta, ardhāṅgavāta, pārśvavāta, ātapavāta, agnivāta, āḍhyavāta, pāṇḍuvāta, svedavāta (181), sandhivāta, sādhyavāta, śirovāta, svarahīnavāta, raktavāta, kṣīṇavāta, khañjāvāta, kalāvāta, sarvāṅgavāta, styānavāta, gulphavāta (182), aṅgulīvāta, jānuvāta, jaṅghāvāta, a-sthivāta, kākavāta, bhramaṇavāta, paṅgavāta, daṇḍavāta, mandavāta, koṣṭhavāta (183), gulmavāta, majjāvāta, kṣatavāta, vaśāvāta, aṇuvāta, dadhivāta, kaṃavāta, ūrdhnavāta, āmavāta, badhiravāta, and unmādavāta (184).

Chapter eleven,¹³⁰⁸ on raktapitta, presents no unusual features.

Chapter twelve¹³⁰⁹ deals with: a list of the twenty-four pittarogas; the symptoms of these disorders: āvarṇapaittya, vivarṇapaittya, sūryāvartapaittya, kāmīlāpaittya (230), amlapitta (230–231; three different versions), raktapaittya, svedapaittya, unmādapaittya, puṇḍarikapaittya, bhujaṅgapaittya, karapādapaittya, śītapaittya (231), mūrḥchāpaittya (231–232), mādḥuryapaittya, kusumapaittya, krodhapaittya, bhraṁśapitta, śīraḥpaittya, kṣudhāpaittya, tṛṣṇāpaittya, durbhāṣāpaittya, carmapitta, durgandhapitta, and mādanapitta (232).

Chapter thirteen,¹³¹⁰ concerned with arocaka, presents no unusual features.

Chapter fourteen,¹³¹¹ dealing with kāsa, enumerates and describes the twenty kapharogas: pūrvakāsa, kṣayakāsa, raktakāsa, cippikā(kāsa), vātakāsa, pittakāsa, kṣatakāsa, śuktikā(kāsa), āmakāsa, pāṇḍukāsa, kṛṣṇakāsa, śleṣmakāsa, dadhikāsa, śleṣmajihvaka, kaṇṭhajihva, upajihva, jihvakakāsa, ūrdhvakāsa, śleṣmabhaṅga, and śleṣmakusṭhaka (248); it lists the symptoms of twenty varieties of kāsa, which are the same as the twenty kaphavikāras (249–251).

Chapters fifteen to seventeen,¹³¹² dealing with śvāsa, hikkā, and svarabheda, present no unusual features.

Chapter eighteen¹³¹³ deals with prameha and the pramehapīṭikās (285–289). Subjects added are: the reason why prameha does not occur in women; the characteristics of bahumūtra; the ten kinds of pīṭikā, which develop in prameha when neglected, are said to occur in sandhis, marmans and fleshy parts (288); complications of the pīṭikās; the fourteen marmans are found between the brows, on the crown of the head, at the throat, at the śīraḥsthala, in the region of the heart, at the navel, the eyes, testicles, ankles, buttocks, hips, big toes, forefingers, and roots of the arms; the examination of the urine of prameha patients and signs of prognostic significance (289).

Chapter nineteen,¹³¹⁴ concerned with mūtrakṛcchra, adds a purīṣaja type (301). Chapter twenty,¹³¹⁵ on mūtrāghāta, adds a second set of symptoms of vātakuṇḍalikā (307).

Chapters twenty-one (on aśmarī), twenty-two (on śūla), twenty-three (on udāvarta and ānāha), twenty-four (on gulma), twenty-five (on hṛdroga), twenty-six (on udara), twenty-seven (on vṛddhi and vardhma), and twenty-eight (on medoroga),¹³¹⁶ present no unusual features.

Chapter twenty-nine,¹³¹⁷ dealing with vātarakta, adds verses on pittarakta and kapharakta (371).

Chapters thirty (on ūrustambha), thirty-one (on āmavāta), thirty-two (on śītapitta, udarda, koṭha), and thirty-three (on amlapitta),¹³¹⁸ present no unusual features.

Chapter thirty-four¹³¹⁹ deals with agnimāndya, bhasmaka, ajīrṇa, viṣūcī, alasaka, daṇḍālasaka, and vilambikā (399–402), mainly on the lines of the *Mādhavanidāna*. Added are verses on bhasmaka (399–401), vātājīrṇa and kaphājīrṇa (400–401). The verses on viṣūcī differ from those of the *Mādhavanidāna* and describe its general symptoms, those of the types due to vāta and kapha, the disorder called pārśnīdāha, which occurs in very serious cases of viṣūcī, the complications of viṣūcī, and signs pointing to incurability (401). Some more extra verses are about daṇḍālasaka (402).

Chapters thirty-five (on arśas), thirty-six (on kṛmiroga),¹³²⁰ thirty-seven (on tṛṣṇā), thirty-eight (on dāha), and thirty-nine (on mūrḥchā, tandrā, klama, nidrā, samnyāsa) do

not contain interesting additional material.

Chapter forty deals with madātyaya (437–438). Its verses are taken from the *Mādhavanidāna*, but a number of stanzas found in that treatise are omitted.¹³²¹ A verse on the proper amount to be drunk for rasāyana purposes is added (438).

Chapters forty-one (on unmāda) and forty-two (on apasmāra) are devoid of noteworthy features.

Chapter forty-three¹³²² deals with kuṣṭha. Added verses are about vipādikā and vicarcikā (451–452), kacchūkuṣṭha, galatkuṣṭha, śvitra (452), prasūtikūṣṭha, curable and incurable types of kuṣṭha (453), incurable types of kilāsa and other forms of kuṣṭha (454), and the incurability of śvetakuṣṭha and śvitra (455).

Chapters forty-four (on visarpa) and forty-five (on visphoṭaka) present nothing unusual.

Chapter forty-six deals with masūrikā. Additional verses are about the pathogenesis of the disease and the explanation of its name (480–481), the complications, the variety called śītalā, the characteristics of bṛhatī śītalā and kodrava(masūrikā), and the varying degrees of curability of the disease (483). The section on treatment (483–487), of an āyurvedic type and not containing rasas, also describes the religious treatment of the disease and refers to the *Śītalāstotra* (485).

Chapter forty-seven (on galagaṇḍa) presents nothing unusual.

Chapter forty-eight, on gaṇḍamālā, presents a list of four varieties of this disorder, said to be caused by parasites (kṛmi) and located in the cardiac region, neck, cheeks (kapola) and head (uttamāṅga); it also lists four vṛṇas, found in the regions of the teeth, hips, ears, and shoulders (aṁsagaṇḍaka) respectively; the characteristics of gaṇḍamālā occurring on the scalp (kapāla) are described.

Chapters forty-nine (on granthi), fifty (on arbuda), and fifty-one (on ślīpada) do not give additional material.

Chapter fifty-two, dealing with vidradhi, adds verses on stanavidradhi (500).

Chapters fifty-three (on vṛṇa), fifty-four (on agnidagdha), fifty-five (on āgantukavṛṇa), fifty-six (on nāḍivṛṇa), and fifty-seven (on bhagandara) present no unusual features.

Chapter fifty-eight deals with upadaṁśa. Additional verses describe the five varieties of upadaṁśa and their chief symptoms (523). Extra verses give details about liṅgavartis, which are found in both males and females, about their locations, their forms, and the symptoms they bring about (524).¹³²³

Chapter fifty-nine deals with śūkadoṣa.

Chapter sixty¹³²⁴ deals with the kṣudrarogas. Additional verses are about: the kulīra type of kunakha (532); the varieties of palita: due to vāta, pitta, kapha, saṁnipāta, and old age; the treatment of valī and palita by the administration of the drug called candrodaya; the type of baldness (keśanāśa) caused by parasites and its treatment with jayantikā (533); vaktradurgandha, pulipirī (also called kaṭipīṭikā: 543), and chāyāroga (535). Gudabhrāṁśa is omitted.

Chapter sixty-one¹³²⁵ deals with the pathogenesis and symptoms of snāyuroga, which is of five types: associated with vāta, pitta, kapha, blood, or all the doṣas (543–544).

Chapter sixty-two deals with mukharogas. Additional stanzas are about: the numbers of the groups of mukharoga, making a total of sixty-four; an enumeration of the eight oṣṭharogas (546) and sixteen dantaveṣṭharogas (= dantamūlarogas) (547); hanumokṣa; an enumeration of the five jihvāroga (548).

Chapter sixty-three deals with karṇarogas. Additional verses give an enumeration of the twenty-eight karṇarogas (558), the characteristics of karṇāntarvraṇa, and the lethal complications of karṇaśūla (561).

Chapter sixty-four deals with nāsāroga. Additional verses are about: the aetiology of nāsāroga; an enumeration of the thirty-four nāsāroga (564); the aetiology of pīnasa; the seven varieties of pīnasa: red, yellow, white, dark-blue, hāridra, of a mixed colour, and bad-smelling (565); nāsārśas (567).

Chapter sixty-five deals with śīrorogas. Additional verses are concerned with the aetiology of the group of eleven śīrorogas (573).

Chapter sixty-six¹³²⁶ deals with netrarogas. Additional verses are about: the general pathogenesis of netrarogas; the numbers of the groups of netrarogas; their total number is ninety-four (581).

Chapter sixty-seven,¹³²⁷ a very long one, deals with the processing of inorganic substances, their medicinal properties and their uses.

Its subjects are: the seven metals; the purification of gold, the preparation of its bhasman, the medicinal properties, rules for the use of gold preparations, the bad effects of unpurified gold (602–603); the origin of silver, its names, its purification, etc. (604–605); copper, its origin, etc. (605–607); tin (607–609); lead (609–610); iron and maṇḍūra (611–616); kārṇṣya (616); pittala (616–617); the origin of mercury; its varieties (617); its praise (617–618); its names; the bad effects of looking down upon it (618); two versions of the eight doṣas and the disorders they may bring about (618–619); the seven kañcukas and the disorders they may cause; the effects of purified and unpurified mercury (619); the purification of mercury and the eight saṃskāras (619–623); the preparation of a bhasman (623–624); the extraction of mercury from cinnabar (624); the preparation of rasasindūra and rules regarding its use (625); rules for the use of a bhasman (625–627); rasājīrṇa and its treatment; rasatāpa and its treatment (627); wholesome and unwholesome things during the use of mercurial preparations (627–628); sulphur, its origin, purification, etc. (628–630); mica (abhraka), its origin, purification, etc. (630–633); haritāla (633–635); añjana (635); kāsīsa (635–636); gairika (636); hīṅgula (636–637); manaḥśilā (637); the purification of śaṅkha (637); the colours of various bhasmans (637); rules regarding the use of bhasmans; substances for the killing of the metals; the disorders arising from the use of unpurified metals; the seven upadhātus and their origin (638); svarṇa- and tāmramākṣika (638–640), tutthā, rasaka, kañkuṣṭha, sindūra (640), ākhupāśāṇa, raktapāśāṇa (641); śilājatu (641–642); the eight sādharmaṇarasas: kampilla, lavaṇa, gaurīpāśāṇa, navasāgara, darada, vahnijāra, girisindūra, and muddāraśṅga; kampilla; bola; mastakī (642); kapharī; sarjakṣāra; yavakṣāra; the five salts (643); the purification of trikaṭuka, vāraṇapippalī (= gajapippalī), aphenā (opium), rāmaṭha (= hīṅgu), the two kinds of jīra, eraṇḍabīja and dantibīja, viṣamuṣṭi, nepāla, and viṣa (= vatsanābha) (644); the properties and uses of rasakarpūra; the nine ratnas; their

purification (645) and killing; diamonds (645–648); coral, pearls, puṣyarāga (648); marakata (648–649); vaidūrya, gomedika, māṇikyā (649), nīla; vaikrānta (650–651).

Chapter sixty-eight describes the vidyādhara yantra, ṭankaya yantra, vālukā yantra, garbhaya yantra (652), kacchapaya yantra (652–653), jalaya yantra, gaurī yantra (653), vajramūṣā, bhūdhara yantra, koṣṭhaya yantra, ḍolā yantra, tulā yantra (654), pātālaya yantra, and tejoya yantra; a number of puṣas: mahāpuṣa, gaja- or māhiṣapuṣa, vārāhapuṣa, kaukkuṭapuṣa (655), kāpotapuṣa, govārapuṣa, and kumbhapuṣa.

Chapter sixty-nine is concerned with weights and measures (656–657). Bhoja is referred to.

Chapter seventy is about paribhāṣās. The subjects dealt with are: the plants which are kandasāra, mūlasāra, mūlatvaksāra (658), dārutvaksāra (658–659), sārasāra, patrasāra, puṣpasāra, phalasāra, bījasāra (659), kṣārasāra, kṣīrasāra, niryāsasāra, and sarvāṅgasāra; medicinal substances to be used in a fresh (ārdra) state; those to be used without the outer layers (niṣṭvac) (660) and with or without the husks; substitutes for drugs which are difficult to obtain (661); substitutes for the drugs of the aṣṭavarga group; the items belonging to a large number of groups of substances (662–664).

Chapter seventy-one is concerned with poisonous substances. The subjects are: kṛtrimaviṣa and the treatment of its effects (664); recipes useful in cases of poisoning; ¹³²⁸ recipes useful against the effects of the bites of dogs, ¹³²⁹ rats ¹³³⁰ (665), and scorpions; the recipe of prabhāvatīvaṭī (666); antidotes (in Telugu) (666–667); two more antidotes (667–668); ¹³³¹ recipes (in Telugu) (668–671).

The order of the diseases deviates, for some stretches much, for other stretches less, from the *Mādhavanidāna*. Women's and children's diseases are not discussed at all. Chapters on rasāyana and vājīkaraṇa are absent.

Many unusual disorders, described in the work, are also found in the *Basavarājīya*, a later work, which may have borrowed them from Vallabhendra.

Sources are rarely mentioned. Noteworthy are recipes said to be from the *Mādhavanidāna* and *Mādhavakalpa* (665). ¹³³²

A *Vaidyacintāmaṇi* is quoted in several treatises, but it is often impossible to know from which source the citations derive, since a number of authors is credited with a treatise of that title.

The author, who calls himself Vallabhendra, ¹³³³ was a son of the Telugu brāhmaṇa Amareśvarabhaṭṭa, ¹³³⁴ of Śrīvatsagotra ¹³³⁵ and Āpastambasūtra, ¹³³⁶ and belonged to the Indrakāṇṭha family. ¹³³⁷

The Telugu author Devulapalli Venkaṭanarasakavi wrote a medical work, called *Āndhracintāmaṇi*, that is almost wholly on the lines of the *Vaidyacintāmaṇi*. The date of this treatise is crucial for the chronological position of Vallabhendra. P. Hymavathi regards it not inappropriate to surmise that Venkaṭanarasakavi lived in the last quarter of the sixteenth century, which would, if proved right, place Vallabhendra in the first half of the same century or earlier. Another Telugu version of the *Vaidyacintāmaṇi* was made by Dhenuvukonda Keśavakavi. ¹³³⁸

P. Hymavathi has collected evidence that, in his opinion, is in support of placing Vallabhendra in the fourteenth century: the *Basavarājīya* quotes Vallabhendra's work; Vallabhendra took some verses from the *Bāhaṭagranta*, dated to about A.D. 1300 or

the early fourteenth century; a Śrīgīrīpaṇḍita, son of Vallabha and also of Śrīvatsagotra, is mentioned in a grant of A.D. 1376; the medical author Lakṣmaṇa, who lived during the reign of Bukka II (A.D. 1404–06), was the son of a Vallabhendra, of Śrīvatsagotra and of Āpastambasūtra.

Rāmnivās Śarmā¹³³⁹ and Jyotir Mitra¹³⁴⁰ place Vallabha in the sixteenth century. B. Rama Rao¹³⁴¹ assigns Vallabhendra to the seventeenth century, without giving clear arguments for this dating.

VĀMĀCĀRYA: *Bālabodha*.¹³⁴²

VĀMANA: (1) *Āyurvedaprakāśa*;¹³⁴³ (2) *Vāmananighaṇṭu*.¹³⁴⁴

VANAMĀLIMIŚRA: *Jvarāvalī*.¹³⁴⁵

VĀNARĀCĀRYA: *Bālabodha*.¹³⁴⁶

VANDHYOPĀDHYĀYA: *Cikitsāñjana*.¹³⁴⁷

VANDĪMIŚRA, son of Jagadīśa: *Yogasudhānidhi*, a work in sixteen chapters (kalā), dealing with kaumārabhr̥tya.¹³⁴⁸

VĀṆĪKAVI: *Vāṇīkārīkā*.¹³⁴⁹

VARARUCI: *Ariṣṭasthāna*.¹³⁵⁰

VASANTARĀJA: *Vasantarājacikitsā*.¹³⁵¹

VĀSUDEVA: *Vāsudevānubhava*,¹³⁵² a compilatory work in which many sources are quoted or referred to. These sources are: Agniveśa, Ātreya, Aśi, Bheḍa, Bṛhadātreya, Bṛhadatṛi, Cakradatta, Caraka, Carpaṭi, Dhūrjaṭi (or Jaijjaṭi), Gorakṣa, Jālandhari, Laghvatṛi, Nāgārjuna, Rasāmbhonidhi, Śārṅgadhara, Suśruta, Vāgbhaṭa, Vṛnda, and Vyāḍi.¹³⁵³

The *Vāsudevānubhava* is quoted by Kāśīrāma,¹³⁵⁴ which proves that its author lived before the sixteenth or seventeenth century. It is also quoted in the *Rasarājalakṣmī*¹³⁵⁵ and Viṭṭhala's *Rasasindhu*.¹³⁵⁶

VĀSUDEVA: (1) *Sarvāṅgasundarī*, a commentary on a *Prayogasāra*;¹³⁵⁷ (2) *Yogasārasaṃgraha*.¹³⁵⁸

VEDAVYĀSA: *Āyurveda*.¹³⁵⁹

VEDENDRA: *Vedendrasāra*.¹³⁶⁰

VEHITHADEVA: *Sadyogakanṭhikā*, also called *Rasasāra* and *Rasaratnākara*. Rasauśadhas have an important place in this work.¹³⁶¹

VEṆGALAGIRISŪRI of Mudgala gotra: *Sūtrasthānasaṃjīvinī*, a work in prose dealing with subjects expounded in the sūtrasthānas of Vāgbhaṭa, Suśruta, etc.¹³⁶²

VEṆĪPAṆḌITA: *Svedavidhi*.¹³⁶³

VENĪRĀMAŚĀKADVĪPIN: *Māṃsabhakṣaṇadīpikā*, a work in 500 verses, denouncing animal food. ¹³⁶⁴

VENKATĀCĀRYA, of Gautama gotra: ¹³⁶⁵ *Bṛhadvaidyaratnākara*. ¹³⁶⁶ This treatise is divided into a pūrvabhāga, containing eight taraṅgas, and an uttarabhāga, containing two taraṅgas.

The pūrvabhāga deals with the origin of āyurveda, aṣṭasthānaparīkṣā, and the nidāna of the diseases; the uttarabhāga is concerned with treatment of the diseases, rasāyana, vājīkaraṇa, the purification of inorganic substances, the application of leeches, etc.

The order of the diseases agrees partially only with that of the *Mādhavanidāna*. Each chapter on treatment begins with karmavipākā concerning the disease dealt with in the chapter and with propitiatory measures (śānti).

Many Smṛtis and Purāṇas are quoted in the work.

Veṅkaṭācārya may have lived in the eighteenth century or later. ¹³⁶⁷

VENKAṬEŚA: *Bālaparyāyamañjarī*. ¹³⁶⁸

VENKAṬEŚA: *Bheṣajakalpasamuccaya*. ¹³⁶⁹

VENKAṬEŚAKAṆḌA: *Vaidyaśiromaṇi*. ¹³⁷⁰

VENKAṬEŚVARA: *Dakṣiṇāmūrtinighaṇṭu*, a work in six chapters (ullāsa). The author belonged to the Ellā- or Yallāpantulu family. ¹³⁷¹

VIDAGDHACŪḌĀMAṆI: *Pañcāśannighaṇṭusāra*. ¹³⁷²

VIJAYA, a Jain upādhyāya, was the author of a compilatory work called *Kalyāṇakāraka* or *Vaidyasārasaṃgraha*. ¹³⁷³ It is based on the works of Hārīta, Rudradeva, Suśruta, Vāgbhaṭa, and others. The treatise contains formulae deriving from Pūjyapāda and Samantabhadra. Some verses on nāḍīparīkṣā and other subjects are said to have been borrowed from the *Merudandaśatāntara*. ¹³⁷⁴

VIJAYAKRṢṆA: *Sārasaṃgraha*. ¹³⁷⁵

VINĀYAKA: *Guṇaśāstra*. ¹³⁷⁶

VĪRABHADRA: *Vaidyacinātamaṇi*. ¹³⁷⁷

VĪRAKRṢṆA, son of Gopīdevī and Rāghava, pupil of Sudarśanayati: *Kāyacikitsā-lu*. ¹³⁷⁸

VĪRARĀJA: *Vīrarājoktivilāsa*. ¹³⁷⁹

VĪREŚVARA: *Rogārōgavāda*. ¹³⁸⁰

VĪREŚVARĀNANDA, pupil of Hariharānanda: *Yogaratanākara*. ¹³⁸¹

VIŚĀLAKĪRTI: *Ārogyacinātamaṇi*. ¹³⁸²

VIŚVANĀTHA, son of Padmanābha: *Bālacandraprakāśa*. ¹³⁸³

VRAJABHŪṢANA: *Guṇaratnākara*. ¹³⁸⁴

VRAJARĀJA: *Meghavinoda*.¹³⁸⁵

VṚṢAGIRINĀTHA: *Dravyakalpabhūṣaṇa*.¹³⁸⁶

VYĀSAPAṆḌITA: *Arkaprakāśa*.¹³⁸⁷

YĀŚOVĪRA: *Avyaktasaṅgrahaṇa*.¹³⁸⁸

Chapter 4

Various anonymous works

ABHIDHĀNARATNAMĀLĀ.¹

ABHINAVACINTĀMAṆI.²

ABHINAVACINTĀMAṆISĀRA.³

ABHINYĀSACIKITSĀ.⁴

AGADARĀJARATNA.⁵

AGNIKARMAN.⁶

AGNIMĀNDYACIKITSĀ.⁷

AGNIPURĀṆA.⁸ Material of medical interest is found in a number of chapters.⁹

Chapter 140 describes drugs and some other articles used in *vaśya* (subjugation), etc. Their names are: *adhaḥpuṣpā*, *bhṛṅgarāja*, *gorakṣa*, *karkaṭī*, *kṛṣṇadhustūra*, *kṛtāñjali*, *kumārī*, *lajjālukā*, *mayūraśikhā*, *meṣaśṛṅgī*, *mohalatā*, *putrañjīva*, *rudantikā*, *rudrajaṭā*, *sahadevī*, *sītārka*, *snuhī*, and *viṣṇukrāntā* (1–2).

Chapter 141 enumerates thirty-six plants and other drugs used in making men immortal (*amarīkaraṇa*): *akṣya*, *balā*, *bhṛṅga*, *bilva*, *dhanyāka*, *dhātrī*, *eraṇḍa*, *gokṣuraka*, *guḍūcī*, *haridrā*, *harītakī*, *javānikā*, *jīraka*, *kaṇṭakārī*, *khadira*, *kṛtamāla*, *kṣāra*, *marīca*, *muṇḍī*, *nimba*, *parpata*, *pippalī*, *pippalīśīphā*,¹⁰ *punarnavā*, *rucaka*, *saindhava*, *śatamūlī*, *śatapūspī*, *siddhārtha*, *sindhuvāraka*, *śuṇṭhī*, *vaca*,¹¹ *vacā*, *vahni*,¹² *vāsaka*, and *viḍaṅga* (2–5). The items to be employed for particular purposes are specified. Among these purposes are the elimination of diseases due to deranged *vāta*, *pitta* and *kapha* (12–14), disorders caused by *grahas* (15), etc.

Chapter 229 describes auspicious and inauspicious dreams.¹³

Chapter 246 deals with the examination of gems (*ratnaparīkṣā*). Gems to be worn by a king are: *candrakānta*, *gandhaśasyaka*, *indranīla*, *jyotīrasa*, *karketana*, *mahānīla*, *marakata*, *mauktika*, *padmarāga*, *pulaka*, *puṣparāga*, *sphaṭika*, *sūryakānta*, *vaidūrya*, and *vajra* (1–3ab). This list is followed by a second one (3cd–6); some of the gems of this second list are: *bhallātaka*, *girivajra*, *gomeda*, *pīlu*, *pravālaka*, *rājapaṭṭa*,¹⁴ *rudhirākṣa*, and *saugandhika*. Several types of pearls are mentioned (12–13).

Chapters 279 to 286 contain a medical treatise, expounded by Dhanvantari to Suśruta.¹⁵ Chapter 282 deals with *vṛkṣāyurveda*.¹⁶ Chapter 285 is remarkable in giving an account of Ātreya's teachings on *siddhayogas*, as reported by Dhanvantari.

Chapters 294, 295 and 298 are concerned with snake-bites, the bites of other poisonous animals, and their treatment.

Chapter 299 is about disorders in children caused by demonic beings.¹⁷

Chapter 370 is concerned with anatomy.¹⁸

ĀHĀRAVARJYĀVARJYAPADĀRTHĀḤ.¹⁹

AJĪRṆAKAŚĀYAVIDHĀNA.²⁰

AJĪRṆAMAṆJARĪ.²¹

AJĪRṆANIDĀNA.²²

AJĪRṆAUŚADHI.²³

THE AKṢIROGANIRMŪLANA,²⁴ concerned with the treatment of eye diseases, and said to form the ninety-fourth chapter of the *Sanatkumārasaṃhitā* of the Pāñcarātrā-gama,²⁵ passes for teachings given by Sanatkumāra to Nārada.²⁶ The types of treatment described in this text are said to have met with success in the case of Bṛhadratha, son of Pāribhadra, king of Kāśī.²⁷

The *Sanatkumārasaṃhitā* is quoted by Hemādri and therefore earlier than the thirteenth century.²⁸ Passages from it have been identified among the quotations in Yāmunācārya's *Āgamaprāmāṇya*, which dates from the tenth century.²⁹

ĀLOKĀMṚTA.³⁰

AMARAVINODA.³¹

ĀMAVĀTACIKITSĀ.³²

ĀMAYACIKITSĀ.³³

ĀMLAVETASANIRŪPAṆA.³⁴

AMṚTAMAṆJARĪ.³⁵

ĀNANDAKHAṆḌA.³⁶

ANANTAGHṚTA.³⁷

AṆḌAROGANIDĀNACIKITSĀKRAMA.³⁸

AṆGAVAIDYANIDĀNA.³⁹

AṆJANAVIDHI.⁴⁰

AṆKOLAKALPA.⁴¹

AṆKOLATAILAVIDHI.⁴²

AṆKOLATAILOTPĀDANAVIDHI.⁴³

ANNAPĀNAVIDHI.⁴⁴

ANUBHAVASĀRA.⁴⁵

ANUBHAVASIDDHARASĀYANA.⁴⁶

ANUPĀNADADHI.⁴⁷

APASMĀRAROGA.⁴⁸

APHENANIRŪPAṆA.⁴⁹

ĀRDRĀMALAKAPRAYOGA.⁵⁰

ARIṢṬANAVANĪTA.⁵¹

ARIṢṬANIDĀNA.⁵²

ĀROGYACINTĀMAṆI.⁵³

ĀROGYAMĀLĀ.⁵⁴

ĀROGYAPĪYŪṢA.⁵⁵

ĀROGYASNĀNAVIDHI.⁵⁶

ARŚACIKITSĀ.⁵⁷

ĀRṢAVIDYĀNUŚĀSANA.⁵⁸

- ARŚOROGANIDĀNA.⁵⁹
 ARUṆAKERĀMṚTATAILA.⁶⁰
 ASĀDHYAŚĪTAPRATĪKĀRA.⁶¹
 ASĀDHYAVILAKṢAṆA.⁶²
 ĀSAVĀDHIKĀRA.⁶³
 ĀSCARYAMAHOADHI.⁶⁴
 AŚĪTIVĀTANIDĀNA.⁶⁵
 AŚĪTIVĀTAROGANIDĀNA.⁶⁶
 AŚMARĪCIKITSĀ.⁶⁷
 AŚMARIROGANIDĀNA.⁶⁸
 AŚṚGDARAROGĀDĀNANIDĀNACIKITSĀ.⁶⁹
 AṢṬĀDAŚAKUṢṬHALAKṢAṆACIKITSĀ.⁷⁰
 AṢṬAGANDHALAKṢAṆA.⁷¹
 AṢṬĀṄGACIKITSĀ.⁷²
 AṢṬĀṄGAHRDAYADRAVYAVIJÑĀNA.⁷³
 AṢṬĀṄGAHRDAYASAṂGRAHA.⁷⁴
 AṢṬĀṄGAKĀṆḌA.⁷⁵
 AṢṬĀPARĪKṢĀ.⁷⁶
 AṢṬASTHĀNAPARĪKṢĀ.⁷⁷
 AṢṬAVIDHAŚOBHĀVYĀDHICIKITSĀ.⁷⁸
 ĀSURĪKALPA.⁷⁹
 ĀSURĪRĀJIKĀKALPA.⁸⁰
 AŚVAGANDHĀDICŪRṆA.⁸¹
 AŚVAGANDHĀKALPA.⁸²
 AŚVAGANDHĀMUSALĪVIJAYĀKALPA.⁸³
 AŚVAGANDHIBĀLĀKṢĀTAILANIRMĀṆAKRAMA.⁸⁴
 AŚVAGANDHIGHṚTA.⁸⁵
 AŚVAGANDHIGHṚTAVIDHĀNA.⁸⁶
 AŚVINĪKUMĀRAVAIDYASĀSTRA.⁸⁷
 ĀTHARVANIGHAṆṬU.⁸⁸
 ATISĀRACIKITSĀ.⁸⁹
 ATISĀRACIKITSĀKRAMA.⁹⁰
 ATISĀRĀDIROGAVICĀRA.⁹¹
 ATISĀRALAKṢAṆA.⁹²
 ATISĀRAPRATĪKĀRA.⁹³
 ATISĀRAVARṆANA.⁹⁴
 ATISĀRAVAṬAKAVIDHĀNA.⁹⁵
 ĀTMARAKṢAṆĀRTHANĪTI.⁹⁶
 ĀTREYASAṂHITĀSĀRA.⁹⁷
 ĀTREYASĀRASAMGRAHA.⁹⁸
 ĀTREYAVĀGYOGA.⁹⁹
 ĀTURAPARĪKṢĀ.¹⁰⁰
 AUṢADHA.¹⁰¹
 AUṢADHACIKITSĀ.¹⁰²

- AUṢADHACIKITSĀNUPĀNAVIDHĀNA. ¹⁰³
 AUṢADHAGRAHAṆAPĀKAVIDHI. ¹⁰⁴
 AUṢADHAGRANTHA. ¹⁰⁵
 AUṢADHAGUṆAPĀTHA. ¹⁰⁶
 AUṢADHAJĀRĀṆAMĀRAṆAVIDHI. ¹⁰⁷
 AUṢADHAJÑĀNATATSAMGRAHAṆAKĀLAPRAYOGAVIDHĀNA. ¹⁰⁸
 AUṢADHAKALPA. ¹⁰⁹
 AUṢADHAKALPASAMŪHA. ¹¹⁰
 AUṢADHAKARAṆAPRAKĀRA. ¹¹¹
 AUṢADHANĀMĀNI. ¹¹²
 AUṢADHANIGHAṆTU. ¹¹³
 AUṢADHANIRMĀṆACIKITSĀVIDHĀNA. ¹¹⁴
 AUṢADHANIRMĀṆACIKITSĀVIDHI. ¹¹⁵
 AUṢADHANIRMĀṆAVIDHI. ¹¹⁶
 AUṢADHANIYAMA. ¹¹⁷
 AUṢADHAPĀKĀDHIKĀRA. ¹¹⁸
 AUṢADHAPĀKĀVALĪ. ¹¹⁹
 AUṢADHAPĀKAVIDHI. ¹²⁰
 AUṢADHAPALLAVA or -*pallavī*. ¹²¹
 AUṢADHAPATTRIKĀ. ¹²²
 AUṢADHAPRAKRIYĀ. ¹²³
 AUṢADHAPRASTUTAKARAṆA. ¹²⁴
 AUṢADHAPRATINIDHIKALPANĀ. ¹²⁵
 AUṢADHAPRAYOGA. ¹²⁶
 AUṢADHAPRAYOGAKĀRIKĀ. ¹²⁷
 AUṢADHARASĀYANA. ¹²⁸
 AUṢADHĀRṆAVA. ¹²⁹
 AUṢADHASĀDHANA. ¹³⁰
 AUṢADHASAMGRAHA. ¹³¹
 AUṢADHASAMGRAHA, TANTROKTA-. See *Tantroktauṣadhasamgraha*.
 AUṢADHASĀRANIRŪPAṆA. ¹³²
 AUṢADHAVIDHĀNA. ¹³³
 AUṢADHAVIDHI. ¹³⁴
 AUṢADHAYOGA. ¹³⁵
 AUṢADHAYOGAGRANTHA. ¹³⁶
 AUṢADHAYOGĀḤ. ¹³⁷
 AUṢADHAYOGAMAHĀRATNĀKARA. ¹³⁸
 AUṢADHAYOGAMAHĀRATNĀVALI. ¹³⁹
 AUṢADHAYOGARATNĀKARA. ¹⁴⁰
 AUṢADHAYOGASAMGRAHA. ¹⁴¹
 AUṢADHIGRANTHA. ¹⁴²
 AUṢADHIKALPA. ¹⁴³
 AUṢADHIKOŚA. ¹⁴⁴
 AUṢADHILAKṢAṆA. ¹⁴⁵

AUṢADHIMANTRAKALPĀDI.¹⁴⁶
 AUṢADHINĀMAMĀLĀ.¹⁴⁷
 AUṢADHINĀMĀNI.¹⁴⁸
 AUṢADHINĀMĀVALĪ. See *Auṣadhināmamālā*.
 AUṢADHIPRATINIDHISAMGRAHA.¹⁴⁹
 AUṢADHIRASĀYANAKALPA.¹⁵⁰
 AUṢADHISAMGRAHA.¹⁵¹
 AUṢADHIVARGA.¹⁵²
 AUṢADHIYANTRATANTRA.¹⁵³
 AUṢADHYĀDINĀMĀVALĪ.¹⁵⁴
 AVALEHASAMGRAHA.¹⁵⁵
 ĀVARTANĪKĀKODUMBARATAILANIRMĀṆAVIDHI.¹⁵⁶
 ĀYUḤPRAMĀṆA.¹⁵⁷
 ĀYURDĀYĀDHIYĀYA.¹⁵⁸
 ĀYURVEDA.¹⁵⁹

The ĀYURVEDĀBDHISĀRA¹⁶⁰ is an anonymous treatise,¹⁶¹ compiled from various sources.

The first part of this work consists of 4433 verses, accompanied by a commentary, probably by the same author. It deals with the nidāna and treatment of the diseases as arranged in the *Mādhavanidāna*, from jvara up to visarpa.¹⁶² The verses on nidāna are largely taken from Mādhava's work, although their order sometimes differs. The second part, containing verses 4434 to 9909, is concerned with the nidāna and treatment of the remaining diseases,¹⁶³ largely arranged again in agreement with the *Mādhavanidāna*. The nidāna verses are mostly from that work; sometimes a few stanzas are added.¹⁶⁴ The order of the diseases in the second part disagrees to some extent with their arrangement in the *Mādhavanidāna*.¹⁶⁵ Diseases added are snāyuka (4490–4504), phiraṅga (4505–4576),¹⁶⁶ śtālā (4577–4650), somaroga (5804–5820), mūtrātisāra (5821–5823), and klaibya (6226–6540). The chapters on the diseases and their treatment are followed by sections on vājīkaraṇa and rasāyana.

The remaining part of the *Āyurvedābdhisāra* is devoted to a variety of subjects: weights and measures (6541–6569); technical rules, the meaning of technical terms, netraparīkṣā (6707–6711), nāḍīparīkṣā (6712–6723), mūtraparīkṣā (6724–6731), anatomy (6863–6924), pharmacological terms (6958–7016), sneha and sveda (7017–7076), pañcakarman (7077–7242), dhūmapāna (7243–7264), etc. This long section on general subjects is followed by a nighaṇṭu (7339–8798), a rather elaborate section on alchemy (8799–9562), and, finally, a chapter on karmavipāka and religious means of counteracting diseases resulting from bad acts in previous lives (9563–9903).

Sources of verses incorporated in the work are: Agniveśa (9372–77), Baudhāyana (9725; 9791–96; 9798–9802; 9812–18), Bhāluki (163), Bhoja (3459; 3502; 3521; 3531; 3651–52; 4459; 4696), Cakra (112), *Cakradatta* (179), Caraka (often), Dhanvantari (584), Dṛdhabala (69), *Gaurīmata* (9434), Gayadāsa (70), *granthāntara* (6907), *Guṇaṅgrantha* (9103), Hārīta (2626–27ab; 3648; 9368–69), *Kāmasāstra* (3992), Karavīra (615), Kāśyapa (1002), *Kāśyapasaṃhitā* (5645), Kharanāḍa (113; 893), Madanapāla

(192), *Mahābhārata* (9682), *Padmapurāṇa* (9584–90), *Rasakalitakalikā* (348), *Rasapaddhati* (9060; 9101–02; 9148), *Rasasaṃketakalikā* (806–807), *Rasavāgbhaṭa* (9136), *Rasendrakoṣa* (982; 1020),¹⁶⁷ *Śātātāpīya* (9719), *Śaunaka* (6997), *Suśruta* (often), *tantrāntara* (often), *Tīsaṭha* (6656–58), *Uśanaśa* (3094), *Vāgbhaṭa* (often), *Videha* (586; 4861–63; 5034; 5055), *Vṛddhagautama* (9804–09; 9873–78), *Vṛddhapārāśara* (9592), *Vṛddhasuśruta* (117–118; 2627c-f), and *Yogacandrikā* (8821–22).

Sources quoted or referred to in the commentary are: *Āyurvedaprakāśakṛt* (8887; 9024), *Bāṣpacandra* (11–12; 2798–99), *Bhāluki* (66; 99), *Bhaṭṭārahariścandra* (2812), *Bhāvamiśra* (3160–65), *Bhoja* (610; 1745; 3511; 4150; 4699; 4703; 4712–13; 5427; 5947), *Cakra* (62–67; 1242–44),¹⁶⁸ *Cakradatta* (183), *Caraka* (often), *Dhanvantarīyanighaṇṭu* (183), *Gadādhara* (1320; 3300–02; 4983; 4987), *Gayadāsa* (2812; 2931), *Hārīta* (57–58; 102–105; 610; 1235), *Harivaṃśa* (30–33ab), *Īśāna* (62; 3098), *Jejjata* (39; 50–51; 62; 120; 1004; 1242–44, twice; 1317; 1324; 1392–93; 1426; 2053; 2087; 2520; 2812), *Kārttika* (57–58; 154; 1320; 1401–02; 4983; 4987), *Kārttikakuṇḍa* (39), *Kīrtikuṇḍa* (97), *Kṣīrapāṇi* (2812),¹⁶⁹ *Madanapāla* (4221), *Mādhavacārya* (3915), *Madhukośa* (4979), *Madhukośakṛt* (117–118; 1256–58; 1401–02; 1742–43; 1751; 2033–34; 2083; 2427; 2656–57; 3098; 3460; 3994; 4072–73; 4654; 4665; 4693; 4699; 4703; 5030; 5291; 5292; 5296; 5633; 5751), *Parāśara* (610), *prācīnāḥ* (2905–07), *Rasapaddhatikṛt* (9184), *Rasapradīpa* (1273–74), *Suśruta* (often), *tantrāntara* (often), *Tīsaṭha* (183), *Vāgbhaṭa* (often), *Vaṅgasena* (183), *Vaśiṣṭhasaṃhitā* (6869), *Vātsyāyana* (4061), *Videha* (102–105; 5006; 5051; 5360; 5485), *Viśvaprakāśa* (6227), *Vṛddhabhoja* (1605), and *Yogapayodhi* (1409).¹⁷⁰

One series of thirteen saṃpipāta fevers is described (71–86), namely the series beginning with sandhiga and ending with abhinyāsa; by far the larger part of the verses are practically identical with those found in the *Bhāvaprakāśa*, but their source is not indicated; the verse enumerating the symptoms of antaka is from some unknown treatise. Most of the verses on the treatment of these fevers (337–389) form part of the *Bhāvaprakāśa* as well. The same applies to those on the therapy of complications of fevers (506–540). A fever, dealt with in the *Āyurvedābhdhisāra* but not mentioned in other sources, is *mundhārajvara* (553–554).

The uparasas distinguished are: *gandhaka*, *hīṅgula*, *abhraka*, *tālaka*, *manaḥśīlā*, *añjana*, *ṭaikaṇa*, *rājāvata*, *cumbaka*, *sphuṭikā*, *śaṅkha*, *khaṭikā*, *gairika*, *kāsisa*, *rasaka*, *kapardikā*, *vālūkā*, *bolā*, *kaṅkuṣṭha*, and *saurāṣṭrī* (8861). Additional uparasas, also called *sādhāraṇarasas*, are: *samudraphena*, *kṣudraśaṅkha*, *muktaśukti*, *jalaśukti*, *mṛttikā*, *agniṣāra*, and *girisindūra* (9027–40).

Three series of metals (*dhātu*) are mentioned: (1) *svaṛṇa*, *tāra*, *āra* (brass), *tāmra*, *nāga*, *vaṇḍa*, and *tikṣṇaka*; mercury (*pārada*) is sometimes added to this series (9041); (2) *svaṛṇa*, *tāra*, *tāmra*, the two metals called *paṅgu*,¹⁷¹ *rīṭikā*, *ghoṣa* (= *pañcaloha*), and *loha* (9042); (3) *suvaṛṇa*, *rūpyaka*, *tāmra*, *raṅga*, *yasada*, *sīsaka*, and *loha* (9043). Metals described are: gold (9049–92), silver (9093–9110), copper (9111–36), tin (9137–66), zinc (9167–70), lead (9171–84), and iron (9185–9264); *maṇḍūra* is added (9265–78).

The upadhātus are: *tāpya*, *vimalā*, *tuttha*, *kāṇṇṣya*, *pittala*, *sindūra*, and *śailaniryāsa* (9046). Another series of upadhātus consists of: *abhraka*, *mākṣika*, *tāla*, *śīlā*, *nīlāñjana*, *tutthaka*, and *rasaka* (9048). Upadhātus described are: *svaṛṇamākṣika* (9279–

94), tāmākṣika (9295–9301), tuttha (9302–14), bhūnāga (9315–21), kāmṣya and pittala (9322–41), bharta (= pañcaloha or pañcarasa) (9342–46), sindūra (9347–52), and śilājatu (9353–92).¹⁷²

The usual nine gems (ratna) are dealt with (9402–31). The uparatnas described are: vaikrānta, sūryakānta, candrakānta, peroja, karpūramaṇi,¹⁷³ kāca, and dugdhapāṣāṇa (9432–49).

Two series of upaviṣas are listed: (1) arka, sehuṇḍa, dhattūra, lāṅgalī, karavīraka, guñjā, ahiphena (9547–48); (2) arka, lāṅgalī, guñjā, hayāri, viṣamuṣṭi, jaipāla, unmatta, ahiphena, bhaṅgā (9550).

Some noteworthy names of drugs are ākulakṛt (380)¹⁷⁴ and kuliñja (380). The commentary mentions not infrequently substitutes for rare drugs¹⁷⁵ and vernacular names of medicinal plants and diseases.¹⁷⁶

Variants of the text are also noticed by the commentator.¹⁷⁷

The commentator appears to be particularly indebted to the authors of the *Madhu-kośa*.

The *Āyurvedābhisāra* is later than the *Bhāvaprakāśā*¹⁷⁸ and *Āyurvedaprakāśa*, which are quoted, and earlier than A.D. 1796, the date of completion of its MS.¹⁷⁹

ĀYURVEDACINTĀMAṆI.¹⁸⁰

ĀYURVEDĀGAMA.¹⁸¹

ĀYURVEDĀGAMANA.¹⁸²

ĀYURVEDAGRANTHA.¹⁸³

ĀYURVEDALAKṢAṆĀDHYĀYA.¹⁸⁴

ĀYURVEDAPARIBHĀṢĀ.¹⁸⁵

ĀYURVEDAPRADĪPA.¹⁸⁶

ĀYURVEDAPRAKĀŚA.¹⁸⁷

ĀYURVEDĀRTHAPRAKĀŚA.¹⁸⁸

ĀYURVEDĀRTHASĀRA.¹⁸⁹

ĀYURVEDASAṂGRAHA.¹⁹⁰

ĀYURVEDASĀRA.¹⁹¹

ĀYURVEDASĀRASAMGRAHA.¹⁹²

ĀYURVEDASARVASVASĀRASAMGRAHA.¹⁹³

ĀYURVEDASARVASVASĀRASAMGRAHA. A treatise preserved in the Tibetan Tanjur.¹⁹⁴ The Tibetan title is *Cheḥi rig-byed mthaḥ-dag-gi sñiṅ-po bsdus-pa*.¹⁹⁵ This work is described as a collection of extracts from the treatises of ten famous ācāryas, arranged by the Tibetan physician Dar-mo sman-rams-pa Blo-bzan chos-grags (Sumatidharmakīrti)¹⁹⁶ and dge-slon Ḥjam-dbyaṅs grags-pa (bhikṣu Mañjuḥśakīrti);¹⁹⁷ the translator was the brāhmaṇa (cāṇs-sras) Bśad-paḥi rdo-rje¹⁹⁸ of Za-hor,¹⁹⁹ who was assisted by the great translator Lhun-grub (Nirābhoga).²⁰⁰ The Tibetan text was written in the Potala.²⁰¹

This treatise consists of a number of heterogeneous tracts dealing with the aetiology of diseases, the examination of the pulse,²⁰² hygiene, therapy,²⁰³ a dialogue between Śiva and Pārvatī, formulae of collyria and caustics, yantras and mantras, etc.²⁰⁴

ĀYURVEDAŚĀSTRAVAIDYAKAGRANTHA.²⁰⁵

ĀYURVEDAŚLOKASAMGRAHA.²⁰⁶

ĀYURVEDASUDHĀNIDHI.²⁰⁷

ĀYURVEDASŪTRA.²⁰⁸ This highly interesting text is the only one so far known that aims at integrating āyurveda and a form of yoga. It is written in sūtra style and comprises 1,252 sūtras, arranged in sixteen chapters (praśna).

Chapter one deals with āma as the source of all diseases (1.8–9), the six tastes (1.40), the transformation (pāka) of three of these tastes by the digestive fire (1.41–46),²⁰⁹ the digestive fire (pācakapitta; 1.48) located in the organ called grahaṇī (1.50), and with fever as a disease caused by weakening of the grahaṇī (1.51–54). Five types of fever are described, namely the vāta, vātapitta, vātakapha, kaphapitta, and āgantu types (1.55–59),²¹⁰ and the signs of release from fever (1.61–65). The statement about the corruption of the grahaṇī as the main cause of diseases is repeated (1.64). The chapter proceeds with statements on the rasas and doṣas, the five mahābhūtas, the vessels (sirā), and the three guṇas, i.e., sattva, rajas and tamas.

Chapter two is concerned with anatomy (2.1–8), bloodletting (2.46–48), fertility, and pregnancy (2.50–69), but in particular with thirty-five lotuses (padma) thought to be present in the human body (2.9–44); each of these lotuses is connected with a specified number of vessels and one or two letters of the alphabet.²¹¹ Towards the end of the chapter (2.71) it is said again that an increase of āma is the cause of all disorders.

Chapter three is about yoga; it quotes, without referring to the source, the *Yogasūtra*.²¹² The teachings on yoga found in the *Āyurvedasūtra* differ in many respects from those of the *Yogasūtra*²¹³ and may have been influenced by some commentators on the latter work, in particular Bhoja²¹⁴ and Rāmānandasarasvatī.²¹⁵ The author lays much emphasis on dietetics as a prerequisite for attaining liberation. He states that sweet foods promote sāttvika, acid foods rājasa, and pungent (kaṭu, ūṣaṇa) foods tāmasa qualities in the human being; consequently, a person striving for liberation should restrict himself to sweet articles of diet (3.7–10). As in almost each of the chapters, it is stressed that the removal of āma is the foremost principle of any treatment (3.33).

Chapter four is about the application of yoga, as described in chapter three, to medicine. By means of yoga one attains nourishment (poṣaṇa) of the dhātus, resulting in health, as opposed to decline (śoṣaṇa) of the dhātus, which leads to a diseased state. Some diseases and their varieties are described, in particular udara (4.17–27),²¹⁶ pāṇḍuroga (4.28–32), and vātavyādhī (4.33–36), as well as some relationships between tastes and dhātus (4.40–42).²¹⁷

Chapter five deals with relationships between tastes and doṣas (5.1–11), the qualities of the five mahābhūtas (5.16), curability and incurability of diseases (5.27–31), relationships between tastes and dhātus (5.44–49),²¹⁸ and various other subjects.²¹⁹

Chapter six opens with a third series of relationships between tastes and dhātus (6.1–7).²²⁰ Other topics of this chapter are the duration of diseases and their curability or incurability (6.23–36), and the properties of various types of milk (6.88–92). The importance of aṁṛta as a cause of other diseases is emphasized (6.39).

Some of the subjects of chapter seven are: the properties of various types of grain

(7.21–29) and inauspicious dreams (7.68–70). The role of āma as a cause of disorders is stressed again (7.54, 58, 59). Chapter eight is, among other things, about types of trees (8.18–22), the śodhana and śamana types of treatment (8.43–48), rules for the regimen to be observed during day and night, and general rules for a virtuous and healthy life (8.54–104). Chapter nine deals with units of time, from lava to samvatsara (9.9–26), the months of the year,²²¹ and the regimen to be observed during the various seasons.

Chapter ten describes the properties and actions of a series of medicinal substances.²²²

Chapters eleven and twelve, concerned with yoga, are borrowed from the *Yogasūtra*.²²³ Chapter thirteen contains many statements on āma and on diseases resulting from its presence in the body (13.6, 7, 10, 11); it has also sūtras on the relationships between the rasas and the seven dhātus.²²⁴ Chapter fourteen enumerates the twenty-seven nakṣatras, together with the letters of the alphabet and the lotuses of the parts of the body with which they are connected.²²⁵ The same chapter contains a list of diseases bound up with the nakṣatras (14.36–62), and the first part of a list of the deities to be worshipped when one suffers from one of these diseases (14.63–87). Chapter fifteen continues the latter list (15.1–62); the remaining part is devoted to the therapy of some diseases. Chapter sixteen is entirely about the treatment of diseases.

The pharmaceutical preparations chiefly used are cūrṇa, taila and leha (15.65, 68, 73); kvāthas (15.65, 68, 73) and gṛhṭas (15.73) are sporadically prescribed. The treatise ends with some basic principles of āyurveda.

The most conspicuous feature of the *Āyurvedasūtra* is the attempt at integrating āyurveda and a particular form of yoga that shows Tantric influence. The six cakras of Tantric yoga are referred to (4.49), although not described; the first of these cakras, called mūlādhāra, is mentioned (4.49), as well as the two main nāḍīs, Idā and Piṅgalā (4.48 and 51). The emphasis on dietetics as a means for attaining yoga calls for attention, as well as the central role of āma and ajīrṇa as causative factors in diseases. The old names of the months of the year and the list of twenty-seven nakṣatras are also noteworthy.²²⁶

Nothing is known with any certainty about the date of composition of the *Āyurvedasūtra*. The style does not prove it to be an ancient work. The use of the old names of the months, the list of twenty-seven nakṣatras, and the absence of any mention of the nine planets do not convincingly point to an early date. The form of yoga described may show that the author was acquainted with Rāmānandasarasvatī's commentary on the *Yogasūtra*. Tantric influences are clearly visible as well. The sources used by the author in describing the properties and actions of medicinal substances cannot be identified.

The commentary on the *Āyurvedasūtra*, written by Yogānandanātha, reaches up to sūtra fifty-one of chapter five. It seems probable that the author regarded his work as completed since the commentary ends with a benedictory verse. The remaining sūtras may have been considered to be less important, or have even been added later.

Yogānanda may have belonged to the school of Rāmānandasarasvatī, the disciple of Govindānandasarasvatī and author of the *Mañiprabhā* commentary on the *Yogasūtra*,²²⁷ who lived about A.D. 1600²²⁸ or in the beginning of the seventeenth century.²²⁹

Sources are rarely referred to by name in the commentary. A *Bheṣajakalpa* is mentioned once (ad 3.17). The *Aṣṭāṅgaḥṛdayasaṃhitā* is profusely quoted.²³⁰ Also quoted are the *R̥gveda* (ad 4.52), *Taittirīyabrāhmaṇa* (ad 4.14), and Māgha's *Śīsupālavadha* (ad 1.33).

ĀYURVEDAVIDYAKĀŚIRĀJAGRANTHA.²³¹

ĀYURVEDAVIJÑĀNA.²³²

ĀYURVEDOKTAPRAYOGA.²³³

ĀYURVEDOPATTI.²³⁴

ĀYURVṚDDHI.²³⁵

BAHUMŪTRĀDICKITSĀ.²³⁶

BAHUMŪTRAROGACIKITSĀ.²³⁷

BAHURŪPAKALPA.²³⁸

BĀKUCĪKALPA.²³⁹

BĀLABODHA.²⁴⁰

BĀLACIKITSĀ.²⁴¹

BĀLACIKITSĀ or *Bālarogādhikāra*.²⁴²

BĀLACIKITSĀMṚTA.²⁴³

BĀLACIKITSĀPADDHATĪ.²⁴⁴

BĀLACIKITSĀPAṬALA.²⁴⁵

BĀLAGRAHACIKITSĀ.²⁴⁶

BĀLAGRAHACIKITSĀTANTRA.²⁴⁷

BĀLAGRAHACIKITSĀVIDHI.²⁴⁸

BĀLAGRAHACIKITSĀYANTRĀṆĪ.²⁴⁹

BĀLAGRAHAHARAVIDHI or *Navagrahaśānti*.²⁵⁰

BĀLAGRAHANĀŚANAMANTRAYANTRA.²⁵¹

BĀLAGRAHAROGACIKITSĀVIDHI.²⁵²

BĀLAGRAHAŚĀNTI.²⁵³

BĀLAGRAHAŚĀNTI or *Bālarakṣāvidhi*.²⁵⁴

BĀLAGRAHAŚĀNTIPRAYOGA.²⁵⁵

BĀLAGRAHASTAVA.²⁵⁶

BĀLAGRAHASTAVA.²⁵⁷

BĀLAGRAHASTAVARĀJA.²⁵⁸

BĀLAGRAHAVIDYASĀRA.²⁵⁹

BĀLAGRAHAVIDHĀNA.²⁶⁰

BĀLAGRAHAYOGAŚĀNTI.²⁶¹

BĀLAGRAHAYOGAŚĀNTIVIDHI.²⁶²

BĀLAJVARĀDICKITSĀ.²⁶³

BĀLAKABODHINĪ.²⁶⁴

BĀLĀMAYACIKITSĀ.²⁶⁵

BĀLAROGACIKITSĀ.²⁶⁶

BĀLAROGĀDHIKĀRA.²⁶⁷

BĀLAROGAHAVIDHĀNA.²⁶⁸

BĀLĀTAILAVIDHĀNA.²⁶⁹

- BĀLATANTRA or *Cikitsākalikā*.²⁷⁰
 BĀLAVAIDYA.²⁷¹
 BĀLĪSIDDHĀNTA.²⁷²
 BĀLOPACĀRAṆĪYA.²⁷³
 BHAIKAVAPRA SĀDA.²⁷⁴
 BHAIṢAJAKALPA.²⁷⁵
 BHAIṢAJYA.²⁷⁶
 BHAIṢAJYARATNĀVALĪ.²⁷⁷
 BHAIṢAJYASĀRASAMUCCAYA.²⁷⁸
 BHAIṢAJYAVASTUNICAYAGUṆOPAYOGANIRṆAYA.²⁷⁹
 BHAIṢAJYAVIDHĀNA.²⁸⁰
 BHAKṢAṆAVIKĀRA.²⁸¹
 BHALLĀTAKAKALPĀDIYOGASAMGRAHA.²⁸²
 BHALLĀTAKAPĀKA.²⁸³
 BHALLĀTAKARASĀYANAVIDHI.²⁸⁴
 BHALLĀTAKĪCŪRṆAVIDHI.²⁸⁵
 BHĀRASAMBHĀRA.²⁸⁶
 BHĀRATASĀRASAMGRAHA.²⁸⁷
 BHĀVACINTĀMAṆI.²⁸⁸
 BHĀVĀRTHADĪPIKĀ.²⁸⁹
 BHEṢAJAIṆĀNAMĀLĀ.²⁹⁰
 BHEṢAJAKALPASAMGRAHA.²⁹¹
 BHEṢAJAKALPASAMUCCAYA.²⁹²
 BHEṢAJAKALPASĀRA.²⁹³
 BHEṢAJAKALPASĀRASAMGRAHA.²⁹⁴
 BHEṢAJANĀMAMĀLĀ or *Dravyanirṇayanighaṇṭu*.²⁹⁵
 BHEṢAJARAHASYA.²⁹⁶
 BHEṢAJASAMHITĀ.²⁹⁷
 BHEṢAJASARVASVA.²⁹⁸
 BHEṢAJATANTRA.²⁹⁹
 BHEṢAJATARKA.³⁰⁰
 BHEṢAJĀVALOKA.³⁰¹
 BHIṢAGĀNANDA.³⁰²
 BHIṢAGGRANTHAMĀLIKĀ.³⁰³
 BHIṢAGRATNAMĀLĀ.³⁰⁴
 BHIṢAGRATNAMĀLIKĀ.³⁰⁵
 BHIṢAGUTSAVA.³⁰⁶
 BHIṢAKCAKRANIDĀNA.³⁰⁷
 BHIṢAKCINTĀMAṆI.³⁰⁸
 BHOGALAKṢAṆA.³⁰⁹
 BHOGYADRĀVYAGUṆAṢAYĀ.³¹⁰
 BHOJANAHITĀHITAVICĀRA.³¹¹
 BHOJANAKASTŪRĪ.³¹²
 BHOJANAŚĀSTRA.³¹³

- BHRGVĀDICŪRNAVIDHĀNA.³¹⁴
 BHRṄGĀMALAKATAILANIRMĀṆAKRAMA.³¹⁵
 BHRṄGARĀJAKALPA.³¹⁶
 BHŪKADAMBAKALPA.³¹⁷
 BHUVANASĀRA.³¹⁸
 BILVĀDILEHYANĪRMĀṆAVIDHI.³¹⁹
 BILVALEHYANIRŪPAṆA.³²⁰
 BRĀHMAṆABHAIṢAJYAKARAṆANIRṆAYA.³²¹
 BRĀHMĀṆḌAKALPA.³²²
 BRĀHMĪGHRṬA.³²³
 BRĀHMĪRASĀYANAVIDHI.³²⁴
 BRHACCIKITSĀSĀRA.³²⁵
 BRHADAGNIKUMĀRAKA.³²⁶
 BRHADBHAIṢAJYAKALPA.³²⁷
 BRHADBHEṢAJAKALPA.³²⁸
 BRHADVAIDYAPRASĀRAKA.³²⁹
 BRHADVAIDYASĀRA.³³⁰
 BRHAJJĪRAKĀDIMODAKA.³³¹
 BRHATĪKALPA.³³²
 CAKRĀṆKAKALPA.³³³
 CAKRAŚEṢA.³³⁴
 CAKRATATTVA.³³⁵
 CAMATKĀRACINTĀMAṆI.³³⁶
 CAMATKĀRANIGHAṆṬU.³³⁷
 CĀMUṆḌIKĀLAGHUNIGHAṆṬU.³³⁸
 CANDRĀRKATĀRAKA.³³⁹
 CANDRODAYA.³⁴⁰
 CANDRODAYAMĀTRĀVIDHĀNA.³⁴¹
 CANDRODAYAPRAKĀŚA.³⁴²
 CANDRODAYAVIDHĀNA.³⁴³
 CAṆKA.³⁴⁴
 CATUḤṢAṢṬIJVARANIDĀNA.³⁴⁵
 CATUḤṢAṢṬIVYĀDHIHARAUṢADHANIRŪPAṆA.³⁴⁶
 CATURDAŚAROGANIDĀNA.³⁴⁷
 CATURDAŚAROGANIDĀNANIRŪPAṆA.³⁴⁸
 CHILARAVAIIDYAPUSTAKA.³⁴⁹
 CIKITSĀ.³⁵⁰
 CIKITSĀCANDRIKĀ.³⁵¹
 CIKITSĀCINTĀMAṆI.³⁵²
 CIKITSĀCINTĀMANIMĀLĀ.³⁵³
 CIKITSĀDARPAṆA.³⁵⁴
 CIKITSĀDĪPIKĀ.³⁵⁵
 CIKITSĀGRANTHA.³⁵⁶
 CIKITSĀGRANTHASĀRA.³⁵⁷

- CIKITSĀKALIKĀ.³⁵⁸
 CIKITSĀKRAMA.³⁵⁹
 CIKITSĀKRAMAUṢADHANIRMĀṆAVIDHI.³⁶⁰
 CIKITSĀMAHĀRṆAVA.³⁶¹
 CIKITSĀMĀLATĪMĀLĀ.³⁶²
 CIKITSĀMĀLIKĀ.³⁶³
 CIKITSĀMAÑJARĪ.³⁶⁴
 CIKITSĀMṚTA.³⁶⁵
 CIKITSĀMṚTADARPAṆA.³⁶⁶
 CIKITSĀMṚTASĀGARA.³⁶⁷
 CIKITSĀMŪLA.³⁶⁸
 CIKITSĀṄGAPARIBHĀṢĀSAMGRAHA.³⁶⁹
 CIKITSĀÑJANA.³⁷⁰
 CIKITSĀPADDHATĪ.³⁷¹
 CIKITSĀPARIBHĀṢĀ.³⁷²
 CIKITSĀPARIKARAVIVARAṆA.³⁷³
 CIKITSĀPHALANIRṆĀYAKANAKṢATRAVIVARAṆA.³⁷⁴
 CIKITSĀPRADĪPA.³⁷⁵
 CIKITSĀPRAKARANA.³⁷⁶
 CIKITSĀPRAKĀṢĀ.³⁷⁷
 CIKITSĀPRAYOGA.³⁷⁸
 CIKITSĀRATNA.³⁷⁹
 CIKITSĀRATNĀKARA.³⁸⁰
 CIKITSĀRATNASAMGRAHA.³⁸¹
 CIKITSĀRṆAVA.³⁸²
 CIKITSĀSĀGARA.³⁸³
 CIKITSĀSAMBANDHA.³⁸⁴
 CIKITSĀSAMGRAHA.³⁸⁵
 CIKITSĀSAMUCCAYA.³⁸⁶
 CIKITSĀSĀRA.³⁸⁷
 CIKITSĀSĀRAKAUMUDĪ or *Sārakaumudī*.³⁸⁸
 CIKITSĀSĀRASAMGRAHA.³⁸⁹
 CIKITSĀSĀRASAMGRAHĀNUKRAMAṆIKĀ.³⁹⁰
 CIKITSĀSĀRASAMUCCAYA.³⁹¹
 CIKITSĀSĀRODDHĀRA.³⁹²
 CIKITSĀSARVASĀGARA.³⁹³
 CIKITSĀSARVASAMGRAHA.³⁹⁴
 CIKITSĀSĀSTRA.³⁹⁵
 CIKITSĀSTHĀNA.³⁹⁶
 CIKITSĀSUDHĀ.³⁹⁷
 CIKITSĀTANTRA.³⁹⁸
 CIKITSĀVIDHĀNA.³⁹⁹
 CIKITSĀVIDHI.⁴⁰⁰
 CIKITSĀVIṢAYA.⁴⁰¹

CIKITSĀYOGA.⁴⁰²
 CIKITSĀYOGAŚATA.⁴⁰³
 CIKITSĀYOGAŚATAKA.⁴⁰⁴
 CIKITSITA.⁴⁰⁵
 CIKITSOPĀYA.⁴⁰⁶
 CIKITSYACIKITSAKAPARĪKṢĀLAKṢAṆAVIDHI.⁴⁰⁷
 CIṆCĀDILEHYAKARAṆAKRAMA.⁴⁰⁸
 CIṆCĀŚAṆKAVAṬĪVIDHI.⁴⁰⁹
 CINTĀMAṆI.⁴¹⁰
 CITRAKĀDITAILA.⁴¹¹
 CITRAKAKALPA.⁴¹²
 COPACĪNĪGUṆA.⁴¹³
 COVACĪNĪSEVANAVIDHI.⁴¹⁴
 COVACĪNYĀDICŪRṆA.⁴¹⁵
 CŪRAṆAGIRI.⁴¹⁶
 CŪRṆĀDHĪKĀRA.⁴¹⁷
 CŪRṆĀDIVIDHĀNA.⁴¹⁸
 CŪRṆALEHYAKARAṆA.⁴¹⁹
 CŪRṆALEHYAKRAMA.⁴²⁰
 CŪRṆĀNI.⁴²¹
 CŪRṆASAMGRAHA.⁴²²
 CŪRṆASAMUDĀYA.⁴²³
 CŪRṆAVIDHĀNA.⁴²⁴
 CŪRṆAVINODA.⁴²⁵
 CŪTĀSTHILEHYAVIDHĀNA.⁴²⁶
 DAKṢIṆĀMŪRTINIGHAṆṬU.⁴²⁷
 DAKṢIṆĀVARTASĀṆKHAKALPA.⁴²⁸
 DĀMPATYASAUKHYAVṚDDHIKARARASĀYANAVIDHĀNA.⁴²⁹
 DĀMPATYOPAYOGIVAIDYAKĪYAVICĀRA.⁴³⁰
 DANTARASANĀROGACIKITSĀ.⁴³¹
 DAŚAPARĪKṢĀ.⁴³²
 DAŚAPARVA.⁴³³
 DAŚAVIDHAPĀKA.⁴³⁴
 DĀTAPUṢṬA.⁴³⁵
 DATTĀTREYAMATA.⁴³⁶

DATTĀTREYATANTRA:⁴³⁷ a treatise on ṣaṭkarman, written in the form of a dialogue between Śiva and Dattātreya.⁴³⁸

The work consists of about 700 verses and some prose, arranged in thirty chapters (paṭala). The contents of the chapters are listed as follows (1.14–17): mārāṇa and mohana (2), stambha (3 and 4), vidveṣa (5), uccāṭana (6), vaśī (7 to 9), ākarṣaṇa (10), indrajāla or kautuka (11), yakṣiṇī (mantrasādhana) (12), rasāyana (13), (mṛtyu)kāla-jñāna (14), anāhāra (15), atyantāhāra (16), nidhidarśana (17), vandhyāputravatīyoga or vandhyāgarbhadhāraṇa (18), mṛta (vatsāsuta)jīvitva (19), kākavandhyāputrakaraṇa

(20), vivādavijaya (21), vājīkaraṇa (22), strīdrāvaṇa (23), vīryastambhana (24), liṅgavardhanādiyoga (25), keśarañjana (26), keśapātana (27), bhūtagrahanivāraṇa (28), grahadosapīḍānivāraṇa (29), and siṃhavyāghrasarpavṛścikāḍibhayanāśana (30). Of some medical interest are chapters thirteen to sixteen, eighteen to twenty, twenty-two, and twenty-four to twenty-eight.

Earlier works, referred to in the introductory stanzas, are: *Amṛteśvaratantra*,⁴³⁹ *Dāmaratantra*, *Kākacaṇḍeśvarī(matatantra)*,⁴⁴⁰ *Merutantra*, *Rādhātanta*,⁴⁴¹ *Tārātanta*,⁴⁴² and *Uḍḍīśatantra*.⁴⁴³

DAVANAGRANTHA.⁴⁴⁴

DEHALAKṢAṆA.⁴⁴⁵

DEHATATTVANIRŪPA.⁴⁴⁶

DEŚALAKṢAṆĀNI.⁴⁴⁷

DEVADĀLĪKALPA.⁴⁴⁸

DEVĀÑJANA.⁴⁴⁹

DEVEŚVARĀDIṢṬANĪYAMASA HITAGAṆAPATISAMUDRAPHALAPRAYOGA. This anonymous work, preserved in the Tibetan Tanjur under the title of *Lha-dbañ-phyug-gis čhogs-bdag-la gnañ-baḥi sa-mu-dra pha-laḥi sbyor-ba kha-bsgyur dan bcas-pa*, was translated by Ngag-dbañ phun-čhogs Lhun-grub.⁴⁵⁰

DEVĪNIGHAṆṬU.⁴⁵¹

DEVĪYĀMALA.⁴⁵² Quoted in the *Rasakāmadhenu*. Mentioned among the sources of the *Pāradasaṃhitā*.

DHAMANIPRAKĀŚA.⁴⁵³

DHANAÑJAYANIGHAṆṬU.⁴⁵⁴

DHANVANTARI.⁴⁵⁵ A comprehensive treatise on generalities, nidāna and treatment, partly composed in the form of a dialogue between a teacher (Dhanvantari) and Śiva, addressed as Īśvara and Maheśvara.⁴⁵⁶

Chapter (prakāśa) one: a series of maṅgalas, addressed to Gaṇeśa, Sarasvatī, Śiva, and Śrīkrṣṇa (1–4); the pādacatuṣṭaya (5–9); omnia relating to the messenger (10–11); śakunas (12–13); aṣṭasthānaparīkṣā (14); nāḍīparīkṣā (15); mūtraparīkṣā (16); malaparīkṣā (17); jihvāparīkṣā (18); śabdaparīkṣā (19); sparśaparīkṣā (20); rūpaparīkṣā (21); drṣṭīparīkṣā (22); concluding verse (23); auspicious dreams (24); inauspicious dreams (25); kālajñāna (26); deśajñāna (the three types of country; 27–30); kṣetrajñāna, as expounded by Śiva (the four types of soil: brāhma, kṣātra, vaiśya, śaudra; 31–35); the properties of substances originating from these soils (36); the deities governing these soils are, according to the teaching of Umāvallabha (= Śiva): Brahmā, Śakra (= Indra), Kinnara, and Īśa (37); the five types of soil: pāṛthiva, āpya, taijasa, vāyaviya, and āntarikṣa (38–42); the properties of products from these soils (43); the deities governing these soils are: Brahmā, Viṣṇu, Rudra, Īśvara, and Sadāśiva (44); the mythical origin of trees from amṛta drops, fallen from

the pitcher snatched by Garuḍa (45); the four kinds of trees, dependent on the type of soil on which they grow (46); the characteristics of brāhmaṇa, kṣatriya, vaiśya and śūdra types of trees (47); the three types of medicinal substances: doṣaprasāmana, dhātupradūṣaṇa, svasthavṛttahita (48); the three types of substances called jāṅgama, audbhida and pāṛthiva (49); substances belonging to these three groups (50–52); the characteristics of male, female and napuṃsaka plants; their properties and uses (53); hunger, thirst and sleep occur in plants too;⁴⁵⁷ the folding together (saṃkoca) of leaves is typical of sleep (54); the composition of plants in the terms of the five mahābhūtas (55); the parts of plants and the substances they contain (56); weights and measures according to the māgadha (57) and kāliṅga (58) systems.

The remaining part of the treatise is devoted to the diseases and their treatment, followed by two chapters on rasāyana and vājīkaraṇa. Each disease is discussed in two chapters: one on nidāna and one on treatment.

The order of the chapters is in general agreement with the *Mādhavanidāna*. The chapters on treatment contain many rasayogas and lohayogas.

The verses on nidāna reproduce in general the *Mādhavanidāna*. Material from other sources is added here and there,⁴⁵⁸ while a number of stanzas accepted by Mādhava are left out. The order of the verses may vary too.

The chapter on jvara begins with a maṅgala addressed to the Pañcānana form of Śiva. It describes tandrā as a dangerous complication of saṃnipāta jvara (jvaranidāna 18). The names of the thirteen saṃnipāta fevers are: sandhika, antaka, rugdāha(ka), citta(vi)bhrama, śītāṅga or śītagātra, tandrika, kaṇṭhakubja, kaṇṭhaka, bhugnanetra or bhugnadīś, raktaṣṭhīvin, pralāpaka, jihvaka, and abhinyāsa (jvaranidāna 20). The duration of each of these fevers is mentioned (jvaranidāna 21). Six among them are curable: sandhika, tandrika, kaṇṭhaka, kaṇṭhakubja, jihvaka, and cittavibhramāś; the remaining seven run a lethal course (jvaranidāna 22). The descriptions of the symptoms of each of these fevers (jvaranidāna 23–35) agree with those found in the *Yogarātnākara*. Two different verses on dhātupāka occur (jvaranidāna 15 and 38); the verse on doṣapāka occurs twice (jvaranidāna 16 and 39). Śīta- and dāhajvara are dealt with twice (jvaranidāna 51 and 52). Jīṃajvara is characterized (jvaranidāna 68). Two verses are devoted to gambhīrajvara (jvaranidāna 72–73). Many verses deal with signs indicating a fatal outcome (jvaranidāna 74–80). The fevers called madhurajvara and kṛṣṇamadhurajvara are described (jvaranidāna 83–84). The chapter on the treatment of fevers also deals with jvarāṭisāra (jvararogacikitsā 153–160). The chapter on the nidāna of ātisāra describes four types of pravāhikā: due to vāta, pitta, kapha and blood (ātisāranidāna 18). The chapter on the nidāna of pāṇḍuroga, etc., describes pānakī (pāṇḍukāmalādiroganidāna 11). Chapters on the nidāna and treatment of somaroga are inserted between those on prameha and medoroga. The chapters on the nidāna and treatment of vṛṇa deal with śārīra- and sadyovṛṇa. The chapter on the treatment of upadaṃśa mentions phiraṅgaroga (upadaṃśarogacikitsā 20, 22, 23, 24, 25) and prescribes rasakarpūra (upadaṃśarogacikitsā 20). The chapters on yonivyāpatti also discuss mūḍhagarbha. A chapter on rasopadravas (hazards of using mercurial products) and vāridoṣa (disorders caused by corrupted water) is inserted between those on rasāyana and vājīkaraṇa. The chapter on vājīkaraṇa includes prescriptions

for stambhana, drāvaṇa and vaśīkaraṇa, as well as puṣpanivāraṇa.

An unusual name of a disorder is saṃgrahakoṣṭhadoṣa (vājīkaraṇa 15).

One of the names of opium, a repeatedly prescribed substance, is āphinga (vājīkaraṇa 46).

Religious elements are not infrequent at all in the prescriptions.⁴⁵⁹

The author does not reveal his name in the introductory stanzas; concluding verses are entirely absent.

The description of aṣṭasthānaparīkṣā points to a date later than Cāmuṇḍa's *Jvaratimirabhāskara*. The references to phiraṅgaroga and its treatment indicate that the *Dhanvantari* is later than Bhāvamiśra.

DHANVANTARICIKITSĀRṆAVA.⁴⁶⁰

DHANVANTARIGRANTHA.⁴⁶¹

DHANVANTARIGUṆĀGUṆAYOGAŚATA.⁴⁶²

DHANVANTARIKAVACA.⁴⁶³

DHANVANTARIPAÑCAKA.⁴⁶⁴

DHANVANTARISAMHITĀ.⁴⁶⁵ Quoted in the *Pāradasaṃhitā*.

DHANVANTARISIDDHĀNTAŚIROMAṆI.⁴⁶⁶

DHANVANTARITANTRAŚIKṢĀ.⁴⁶⁷

DHANVANTARĪYAPATHYĀPATHYA.⁴⁶⁸

DHĀRĀKALPA.⁴⁶⁹

DHĀTRĪMAÑJARĪ.⁴⁷⁰

DHĀTUNIDĀNA.⁴⁷¹

DINACARYĀ.⁴⁷²

DINACARYĀPADDHATI.⁴⁷³

DIVĀKARASAMHITĀ.⁴⁷⁴

DIVYANIGHANṬA.⁴⁷⁵

DIVYASIDDHĀÑJANA.⁴⁷⁶

DIVYAUṢADHĪKALPA.⁴⁷⁷

DIVYAUṢADHINĀMAMĀLĀ.⁴⁷⁸

DIVYAUṢADHIPRAKARANA.⁴⁷⁹

DIVYAUṢADHIPRAKĀŚA.⁴⁸⁰

DIVYAUṢADHIVARṆANA.⁴⁸¹

DOHADAPRAKĀRA.⁴⁸²

DOHADAPRAKĀŚA.⁴⁸³

DOṢĀDIVIJÑĀNĪYĀDHYĀYA.⁴⁸⁴

DRĀKṢĀDIKAṢĀYAVIDHĀNA.⁴⁸⁵

DRAVYĀBHIDHĀNA.⁴⁸⁶

DRAVYACIHNA.⁴⁸⁷

DRAVYAGUṆA.⁴⁸⁸

DRAVYAGUṆA or *Satkantharatna*.⁴⁸⁹

DRAVYAGUṆABHĀŚA.⁴⁹⁰

DRAVYAGUṆĀBHIDHĀNA.⁴⁹¹

DRAVYAGUṆĀDARŚANIGHANṬU.⁴⁹²

- DRAVYAGUṆĀDHIRĀJA.⁴⁹³
 DRAVYAGUṆAKALPAVALĪ.⁴⁹⁴
 DRAVYAGUṆĀKARA.⁴⁹⁵
 DRAVYAGUṆAKOŚA.⁴⁹⁶
 DRAVYAGUṆAMUKTĀVALĪ.⁴⁹⁷
 DRAVYAGUṆANIRŪPAṆA.⁴⁹⁸
 DRAVYAGUṆA(PARI)BHĀṢĀ.⁴⁹⁹
 DRAVYAGUṆAPĀṬHA.⁵⁰⁰
 DRAVYAGUṆARATNĀVALI.⁵⁰¹
 DRAVYAGUṆASAMGRAHA.⁵⁰²
 DRAVYAGUṆASAMKALANA.⁵⁰³
 DRAVYAGUṆASĀTAKA.⁵⁰⁴
 DRAVYAGUṆĀVALI.⁵⁰⁵
 DRAVYAGUṆAVIMARŚA.⁵⁰⁶
 DRAVYAGUṆAVIVEKA.⁵⁰⁷
 DRAVYALAKṢAṆA.⁵⁰⁸
 DRAVYAMUKTĀVALĪ.⁵⁰⁹
 DRAVYANĀMAGUṆAKATHANA.⁵¹⁰
 DRAVYANĀMANIRŪPAṆA.⁵¹¹
 DRAVYANIRŪPĀNIGHANṬU.⁵¹²
 DRAVYANIŚCAYASĀRASAMGRAHA.⁵¹³
 DRAVYANIŚCAYASĀRASAMGRAHAGUṆAPĀṬHA.⁵¹⁴
 DRAVYAPADĀRTHAPRATINIDHI.⁵¹⁵
 DRAVYAPĀRĪKṢĀ.⁵¹⁶
 DRAVYAPARYĀYAGUṆĀKARA.⁵¹⁷
 DRAVYAPRAKĀṢA.⁵¹⁸
 DRAVYARATNĀKARA.⁵¹⁹
 DRAVYARATNĀKARA(NIGHANṬU).⁵²⁰
 DRAVYARATNĀLAMKĀRA.⁵²¹
 DRAVYARATNĀVALI or -ratnāvalī.⁵²²
 DRAVYASAMGRAHA.⁵²³
 DRAVYASĀRASAMGRAHA.⁵²⁴
 DRAVYASĀRASVABHĀVA.⁵²⁵
 DRAVYASIDDHI.⁵²⁶
 DRAVYAŚUDDHI.⁵²⁷
 DRAVYAŚUDDHIKRAMA.⁵²⁸
 DRAVYAŚUDDHIVICĀRA.⁵²⁹
 DRAVYAVAIŚEṢIKA.⁵³⁰
 DRAVYĀVALĪNIGHANṬU.⁵³¹
 DRAVYAVINIRŪPAṆA.⁵³²
 DUGDHAPĀNAVIDHI.⁵³³
 DUḤKĪRĪ.⁵³⁴
 DŪTĀDHYĀYA.⁵³⁵
 DŪTALAKṢAṆANIRŪPAṆA.⁵³⁶

DŪTAPARĪKṢĀ.⁵³⁷
 DVĀDAŚĀRTHANIRŪPAṆA.⁵³⁸
 DVĀDAŚAVĀRṢIKACIKITSĀ.⁵³⁹
 EKADRAVYAVINIŚCAYA.⁵⁴⁰
 EKĀKṢANĀLIKERAKALPA.⁵⁴¹
 EKĀKṢARĪNIGHANṬU.⁵⁴²
 EKAMŪLIKĀPRAYOGA.⁵⁴³
 ELEYĀṆKOLAKRṢṆONMATTACŪRṆAVIDHĀNA.⁵⁴⁴
 ERAṆḌAKALPA.⁵⁴⁵
 ERAṆḌAPRAŚNA.⁵⁴⁶
 GADANIGRAHA.⁵⁴⁷
 GADANIRṆAYA.⁵⁴⁸
 GADĀṆKUṢA or *Sarvajvaracikitsā*.⁵⁴⁹
 GADARĀJARATNA.⁵⁵⁰
 GADAVINODANIGHANṬU.⁵⁵¹
 GAṆANIGHANṬU.⁵⁵²
 GAṆAPĀṬHA.⁵⁵³
 GAṆAPĀṬHACIKITSĀKALIKĀ.⁵⁵⁴
 GĀṆAPATYA.⁵⁵⁵
 GAṆḌAMĀLĀDĪCĪKITSĀ.⁵⁵⁶
 GANDHAKALPA.⁵⁵⁷

GANDHAVĀDA,⁵⁵⁸ an anonymous treatise on cosmetics and perfumery (*gandhayukti* or *gandhasāstra*).

The treatise consists of ninety-three units, mostly comprising one to seven Sanskrit verses, accompanied by a Marāṭhī commentary. One unit (82) is devoid of a commentary; several units (17–18, 24–43, 59–76, 80, 86–93) are not accompanied by Sanskrit verses; two units consist of *śloḥa* verses in Marāṭhī. The treatise ends with a table of contents.⁵⁵⁹

The *Gandhavāda* gives a number of recipes of fragrant preparations for diverse uses. The commentary specifies the ratios of the ingredients and contains a translation of part of the Sanskrit verses.

Sources are not indicated; a few verses, however, agree literally with verses from Gaṅgādhara's *Gandhasāra*.⁵⁶⁰

Many of the preparations described are intended for use at a royal court.⁵⁶¹ A not inconsiderable number of them are provided with names; some are said to have been invented by divine authorities or kings.⁵⁶² The author incorporated a large number of formulae for the substances called *bukā* (units 10 and 24–42)⁵⁶³ and *javādi* (units 5, 20–22, 46, 48).⁵⁶⁴ The substances described were not only used as cosmetics and perfumes, but also to counteract diseases (units 23, 51, 77), for the purpose of *vaśīkaraṇa* (units 2 and 12), and for causing confusion in adversaries (*mohana*; unit 3).

Vernacular names of ingredients are rather common in the formulae.⁵⁶⁵

Noteworthy names of ingredients are: *ambara* (1, 4, 44, 45, 46, 48, 52, 55, 58, 78, 83, 84); *berī* (47, 50, 51, 52, 53, 54, 77, 84); *berikā* (55, 56, 83); *dāracīnī* (commentary

40 and 41); geru (2); kabāba (5); khobara (commentary 45); lobāna (very often, e.g., 1, 4–6, 10, 21–23, 44–47); mastaki (21); mleccha (58); servantī (2); taja (23, 44–45, 48, 58, 78); tavaḥsīra (7, 10).⁵⁶⁶

No particulars are available about the author. The quotations from Gaṅgādhara's *Gandhasāra* in the *Gandhavāda* establish that the latter treatise is posterior to the former. The references to Bhoja and Siṅghaṇa point to a date later than the first half of the thirteenth century, the period in which Siṅghaṇa, the Yādava king of Devagiri, lived. P.K. Gode⁵⁶⁷ was of the opinion that the type of old Marāṭhī in the commentary of the *Gandhavāda* points to a period of composition between A.D. 1330 and 1550. R.T. Vyas, the editor of the text, expressed as his view that it would be more appropriate if the date were fixed between A.D. 1250 and 1300.⁵⁶⁸ The profuse employment of substances, introduced in the Indian materia medica by the Muslims, proves that the work cannot be assigned to a period earlier than 1300. It may even date from a much later time, since the materia medica differs considerably from that employed by Gaṅgādhara in his *Gandhasāra*.

GAṆḌŪŚAPRAKARAṆA.⁵⁶⁹

GAṆGĀDHARA.⁵⁷⁰

GAṆGĀDHARACŪRṆANIRMĀNAKRAMA.⁵⁷¹

GAṆGĀDHARAYOGAVIDHI.⁵⁷²

GARBHACIKITSĀ.⁵⁷³

GARBHADHĀRAṆOPĀYAVIDHI.⁵⁷⁴

GARBHAPRASAVACIKITSĀ.⁵⁷⁵

GARBHAPUṢṬAPRAYOGA.⁵⁷⁶

GARBHARAKṢĀVIDHĀNA.⁵⁷⁷

GARBHASTHITYAUṢADHA.⁵⁷⁸

GARBHAVEDANĀPRATĪKĀRA.⁵⁷⁹

GARBHAYĀTANĀCIKITSĀ.⁵⁸⁰

GARBHIṆĪCIKITSĀ.⁵⁸¹

GARBHIṆYĀDICIKITSĀ.⁵⁸²

GARBHOPANIṢAD.⁵⁸³ This Upaniṣad, attributed to Pippalāda and therefore connected with the tradition of the *Atharvaveda*, is a short post-Vedic work in prose which deals with embryology. Its doctrines partly agree with those of āyurvedic treatises, partly differ from them.⁵⁸⁴

The series of seven elements of the body (dhātu) is said to consist of blood (śoṇita), muscular tissue (māmsa), fatty tissue (medas), tendons (snāyu),⁵⁸⁵ bones (asthi), bone marrow (majjā), and seed (śukra).⁵⁸⁶ The six tastes (rasa) are those of āyurvedic theory. The skull is regarded as consisting of four flat bones (kapāla);⁵⁸⁷ the number of vital spots is 107;⁵⁸⁸ the number of junctures (sandhi) is 180;⁵⁸⁹ the human body possesses 109 tendons (snāyu),⁵⁹⁰ 700 vessels (śīrā),⁵⁹¹ 500 majjās,⁵⁹² and 300 bones.⁵⁹³

The weight of the heart is eight, that of the tongue twelve pala. The body contains one prastha of bile,⁵⁹⁴ one āṇḍhaka of phlegm, one kuḍava of semen,⁵⁹⁵ and two prastha of fat.

GARUḌAPANAĀCĀKṢARĪKALPA.⁵⁹⁶

The GARUḌAPURĀṆA⁵⁹⁷ contains a number of chapters of medical interest.⁵⁹⁸

Chapter two mentions Garuḍa's desire to become a destroyer of the Nāgas (2.49: nāgadāraṇa). Chapter nineteen is about snakes, their bites, and mantras providing protection. Chapter twenty-seven consists of a long mantra said to destroy the poison of all kinds of venomous snakes. Chapter fifty is concerned with daily regimen. Chapters sixty-three and sixty-four describe bodily marks of men and women (narastrīlakṣaṇa), together with their predictive meaning. Chapter sixty-five deals with the same subject according to Samudra.⁵⁹⁹ Chapter sixty-seven is about svarodayasāstra, called pavānavijaya in the colophon.⁶⁰⁰ Chapters sixty-eight to eighty are concerned with ratnaparīkṣā, the science dealing with precious and semi-precious stones;⁶⁰¹ their contents agree for the greater part with Buddhahatṭa's *Ratnaparīkṣā*.⁶⁰²

Chapters 146–219 form a medical treatise that is sometimes called *Dhanvantari-saṃhitā*.⁶⁰³ Chapters 146–167 consist of a Nidānasthāna that is closely related to the Nidāna section of the *Aṣṭāṅgaḥṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*, and may be considered as a third version of the same material.⁶⁰⁴ The chapters on nidāna are presented as being taught by Dhanvantari to Suśruta according to the expositions on the subject by Ātreya and other sages.⁶⁰⁵ The views of Agniveśa and Hārīta are referred to in the chapter on fevers.⁶⁰⁶ Disorders described in the Nidānasthāna of Vāgbhaṭa's works but omitted in the corresponding chapters of the *Garuḍapurāṇa* are svarabheda, mada, murchā and saṃnyāsa.⁶⁰⁷

Chapters 168–174 are a continuation of Dhanvantari's lessons to Suśruta.⁶⁰⁸ These chapters are not said to be based on the views of Ātreya, but on a *Yogasāra*.⁶⁰⁹ Chapter 168 deals with basic principles,⁶¹⁰ such as the three doṣas, the dhātus,⁶¹¹ the tastes, vīrya,⁶¹² vipāka, agni, disturbances of the digestive fire⁶¹³ and their treatment. Chapter 169 describes the medicinal properties of articles of food and drugs. Chapters 170 and 171 are concerned with the treatment of various diseases, and chapter 172 with that of women's and children's diseases,⁶¹⁴ rasāyana, and vājīkaraṇa.⁶¹⁵ Chapter 173 is about the properties and actions of groups of drugs. Chapter 174 describes various gṛhṭas and tailas.

Chapters 175 to 196 consist of medical teachings expounded by Hari to Śiva. Chapter 175 is concerned with the treatment of fevers. Chapters 176 to 193 describe treatments for all sorts of diseases. The contents of these chapters differ considerably from those in which Dhanvantari speaks to Suśruta. Many features point to Tantric influence, for example the large number of mantras⁶¹⁶ and the repeatedly described magical procedures.⁶¹⁷ Chapter 184 mentions the killing (māraṇa) of mercury (rasa; 184.18) and the making of artificial silver and gold (184.19). Chapter 194 is about the vaiṣṇava kavaca which keeps off all diseases, and chapter 195 about a mantra that grants everything one desires. Chapter 196 describes the viṣṇudharmavidyā which enabled Indra to overcome all his adversaries.

Chapter 197 deals with the gāruḍa or gāruḍī vidyā, given by Sumitra (in the beginning of the chapter) or Garuḍa (at the end of the chapter) to Kaśyapa, a vidyā which neutralizes the effects of all kinds of poison.⁶¹⁸ Dhanvantari is the speaker again in

chapter 197.

Chapter 210 deals with the medical treatment of horses and elephants.

Chapter 202 forms a short *nighaṇṭu*, being an enumeration of the names of medicinal plants and other drugs, together with a number of their synonyms.⁶¹⁹

Chapter twenty-two of the *Uttarakhaṇḍa* or *Pretakalpa* of the *Garuḍapurāṇa*⁶²⁰ consists of an interesting small treatise on the embryological development of a human being, expounded by Viṣṇu to *Garuḍa*.⁶²¹

The contents deviate in many respects from what is found on the same subject in *āyurvedic* treatises.⁶²² Sexual intercourse is not allowed on the first four days of the menstrual cycle.⁶²³ The developmental stages of the embryo are called *kalika* (first to fourth day),⁶²⁴ *budbuda* (fifth to ninth day), the stage of the development of *māṁṣa* (tenth to nineteenth day),⁶²⁵ and the stage of the development of *ghanamāṁṣa* (twentieth to twenty-fourth day); from the twenty-fifth day onwards *bala* and *puṣṭi* are said to increase (22–23). At the end of the first month of pregnancy the five *tattvas* are present; the second month is characterized by the development of skin (*tvacā*) and fatty tissue (*medas*); bone marrow and bones come into being in the third month, the hair of the head, as well as the ankles (*gulpha*), in the fourth, ears, nose and the lateral parts of the abdomen (*kukṣi*) in the fifth, the throat, opening of the skull (*randhra*) and back (*pr-ṣṭha*) in the sixth, and the sexual organs (*guhya*) in the seventh month; all the major and minor parts of the body are present from the eighth month onwards (24–26).⁶²⁶

Bodily constituents, bodily functions, mental processes, etc.,⁶²⁷ derived from the five *mahābhūtas*, are enumerated as follows: skin, bones, vessels (*nāḍyaḥ*), body hair and muscles derive from earth, saliva, urine, semen, bone marrow and blood from water, hunger, sleep, thirst, want of energy (*ālasya*) and beauty (*kānti*) from fire, running (*dhāvana*), breathing (*śvasana*), contraction (*ākuñcana*), extension (*prasāraṇa*) and inhibition (*nīrodha*), as well as love (*rāga*), hate (*dveṣa*), shame, fear and confusion derive from wind, the production of sounds (*ghoṣa*), the apertures of the body (*chidra*), a deep voice(?) (*gāmbhīrya*), hearing (*śravaṇa*), and *sarvasaṁśraya*(?) derive from space (30–36).⁶²⁸

The names of the ten chief *nāḍīs* are: *Idā*, *Piṅgalā*, *Suśumnā*, *Gāndhārī*, *Gajajihvā*, *Pūṣā*, *Yasā*, *Alambuṣā*, *Kuhū*, and *Śaṅkhinī* (38–39).⁶²⁹ Ten kinds of *vāyu* are enumerated: *prāṇa*, *apāna*, *samāna*, *udāna*, *vyāna*, *nāga*, *kūrma*, *kṛkara*, *devadatta*, and *dhanañjaya* (40–41).⁶³⁰ The number of hairs on the body is said to be thirty-five millions,⁶³¹ and that of the hairs on the head three hundred thousand (47–48).⁶³² The quantities of a series of constituents of the body are as follows: one thousand *pala* of muscular tissue, one hundred *pala* of blood (*rakta*), ten *pala* each of fat and skin, twelve *pala* of bone marrow, three *pala* of *mahārakta*.⁶³³ two *kuḍava* of semen, one *kuḍava* of *śonita*,⁶³⁴ and six *kuḍava* and a half of phlegm, faeces and urine (48–51).⁶³⁵ A long series of verses (52–66) is devoted to the parallelism between macro- and microcosm; numerous parts of the human body are equated with parts of the macrocosm.⁶³⁶

The *Garuḍapurāṇasāroddhāra* of *Naunidhirāma*⁶³⁷ mentions a disease called *lūtā*;⁶³⁸ twelve kinds of bodily excretions (*mala*) are enumerated.⁶³⁹

Sources of the medical chapters of the *Garuḍapurāṇa* are, apart from the *Aṣṭāṅgaḥṛdayasaṁhitā*: the *Cakradatta*, *Ravigupta's Siddhasāra* and *Vṛnda's Siddhayoga*.⁶⁴⁰

Some medical treatises quoting the *Garuḍapūrāṇa* (or *Gāruḍa*) are Aghoranātha's commentary on his *Bhīṣaksarvasva* and Vaidyārāja's *Sukhabodha*.

GĀRUḌOPANIṢAD.⁶⁴¹ This short Upaniṣad, belonging to the *Atharvaveda*, deals with the *gāruḍabrahma*vidyā, a mantra effective against the effects of the bite of venomous animals, in particular snakes. This vidyā was given by Brahmā to Nārada, who transmitted it to Bṛhatsena; the latter passed it down to Indra, Indra to Bharadvāja, Bharadvāja to his pupils.

The names of many divine serpents are mentioned, as well as numerous venomous animals.⁶⁴²

GĀYAMANTRA(?).⁶⁴³

GHANṬĀKARṆAMANTRAKALPA.⁶⁴⁴

GHṚTACŪRṆATAILANIRMĀṆAVIDHĀNA.⁶⁴⁵

GHṚTĀDHIKĀRA.⁶⁴⁶

GHṚTĀDIYOGA.⁶⁴⁷

GHṚTANIDĀNA.⁶⁴⁸

GHṚTAPRAKARAṆA.⁶⁴⁹

GHṚTARASĀYANACŪRṆAPRAYOGA.⁶⁵⁰

GHṚTARASĀYANALEHYĀÑJANANIRMĀṆAVIDHI.⁶⁵¹

GHṚTASARVASVA.⁶⁵²

GHṚTASIDDHI.⁶⁵³

GHṚTATAILĀTISĀRAVRDDHILAKṢANA.⁶⁵⁴

GHṚTAVAṬAKAGUGGULAVIDHĀNA.⁶⁵⁵

GHṚTAVIDHĀNA.⁶⁵⁶

GHṚTAYOGAVIDHI.⁶⁵⁷

GOPASAMHITĀ.⁶⁵⁸

GOROCANĀKALPA.⁶⁵⁹

GOVINDASOMASETU.⁶⁶⁰

GRAHAṆĪKAVĀṬA.⁶⁶¹

GRAHAṆĪSŪTIKĀVĀYUPRAMEHACIKITSĀ.⁶⁶²

GRAHAṆYATISĀRACIKITSĀ.⁶⁶³

GUḌAKUṢMĀṆḌAPĀKA.⁶⁶⁴

GUDASRĀVAROGA.⁶⁶⁵

GUḌŪCĪKALPA.⁶⁶⁶

GUḌŪCYĀDINIGHANṬU.⁶⁶⁷

GŪḌHĀRTHAPRAKĀŚA.⁶⁶⁸

GUGGULUNIRŪPAṆA.⁶⁶⁹

GUGGULUVAṬAKANIRMĀṆACIKITSĀVIDHI.⁶⁷⁰

GULMACIKITSĀVIDHĀNA.⁶⁷¹

GUṆACINTĀMAṆI.⁶⁷²

GUṆĀDARŚA.⁶⁷³

GUṆAGAṆA.⁶⁷⁴

GUṆAGUṆAGRANTHA.⁶⁷⁵

- GUṆĀGUṆAŚATAŚLOKĪ.⁶⁷⁶
 GUṆAJÑĀNA.⁶⁷⁷
 GUṆAJÑĀNANIGHANṬU.⁶⁷⁸
 GUṆAKARMANIRDEŚA.⁶⁷⁹
 GUṆAMĀLĀ.⁶⁸⁰
 GUṆAMAÑJARĪ.⁶⁸¹
 GUṆANIGHANṬU.⁶⁸²
 GUṆAPĀṬALA.⁶⁸³
 GUṆAPĀṬHA.⁶⁸⁴
 GUṆAPĀṬHAKĀVYA.⁶⁸⁵
 GUṆARATNĀKARA.⁶⁸⁶
 GUṆARATNAMĀLĀ.⁶⁸⁷
 GUṆAYOGAPRAKĀŚA.⁶⁸⁸
 GURUYĀMĀLA.⁶⁸⁹
 GUṬIKĀDHIKĀRA.⁶⁹⁰
 GUṬIKĀDHYĀYA.⁶⁹¹
 GUṬIKĀLAVANĀVIDHĀNA.⁶⁹²
 GUṬIKĀPRAKĀRA.⁶⁹³
 GUṬIKĀPRAYOGA.⁶⁹⁴
 HANUMANNIGHANṬU.⁶⁹⁵
 HARAPRADĪPIKĀ.⁶⁹⁶
 HARICAKRA.⁶⁹⁷
 HARIDRĀROGANIDĀNA.⁶⁹⁸
 HARĪNDRAVAIŚEŚIKA.⁶⁹⁹
 HARĪTAKĪBHEDA.⁷⁰⁰
 HARĪTAKĪKALPA.⁷⁰¹
 HARĪTĀLAKALPA.⁷⁰²
 HĀRĪTAVYUTPATTI.⁷⁰³
 HASTAVRAṆANETRAROGAUSADHANIRMĀṆAVICĀRA.⁷⁰⁴
 HETUPRADĪPIKĀ.⁷⁰⁵
 HITOPADEŚAVĀIDYAKASAMŪHAŚĀSTRA.⁷⁰⁶
 INDRAGRANTHA RASĀYANAPRAKARAṆA.⁷⁰⁷
 INDRĀVALYAIRAṆḌATAILACIKITSĀ.⁷⁰⁸
 INDRĀVĀRUṆĪKALPA.⁷⁰⁹
 ĪŚVARĪKALPA.⁷¹⁰
 JAGATPRAKĀŚA.⁷¹¹
 JALĀDIGUṆAPĀṬHAVIṢAYA.⁷¹²
 JALAMĀNUŚĀDITANTRA.⁷¹³
 JAMBĪRADĀḌIMABĪJASAMKHYĀ.⁷¹⁴
 JĀNGULĪVIDYĀ.⁷¹⁵
 JARĀCIKITSĀ.⁷¹⁶
 JAYAPĀLAKALPA.⁷¹⁷
 JAYAPARĀJAYARATNA.⁷¹⁸
 JIHVOPAJIHVĀROGACIKITSĀ.⁷¹⁹

JINASĀRASAMGRAHA.⁷²⁰
 JĪRṆAKĀLAPRAMĀṆA.⁷²¹
 JĪRṆAKĀRICŪRṆANIRMĀṆĀVIDHI.⁷²²
 JĪRṆAKRAMANIRNAYA.⁷²³
 JĪRṆAMAṆJARĪ.⁷²⁴
 JĪRṆASAMKHYĀ.⁷²⁵
 JĪRṆASAMKHYĀVIVARAṆA.⁷²⁶
 JĪVANTĪPĀKA.⁷²⁷

The anonymous⁷²⁸ JĪNĀNBHĀSKARA⁷²⁹ is an extensive work, in the form of a dialogue between Sūrya and his charioteer Aruṇa, on karmavipāka, which means that it regards illness as the result of morally wrong actions in previous lives. The descriptions of the diseases are sometimes very detailed; their cure rests entirely on religious observances. The introductory part of the treatise is about astronomical and astrological subjects.⁷³⁰

The *Jñānabhāskara* is earlier than the sixteenth century since one of the MSS dates from about A.D. 1500.⁷³¹

A commentary (ṭikā) on this work was written by Panto Bhaṭṭa, son of Lakṣmaṇa Bhaṭṭa.⁷³²

JĪNĀNĀRṆAVA.⁷³³
 JVARACIKITSĀ.⁷³⁴
 JVARACIKITSITA.⁷³⁵
 JVARĀDĀNANIDĀNA.⁷³⁶
 JVARĀDHIKĀRA.⁷³⁷
 JVARĀDHIKĀRASAMGRAHA.⁷³⁸
 JVARĀDHYĀYA.⁷³⁹
 JVARĀDICIKITSĀ.⁷⁴⁰
 JVARĀDICIKITSĀPRAKĀŚA.⁷⁴¹
 JVARĀGHĀTAMAHIMAN, also called *Jvarapratīkāra*.⁷⁴²
 JVARAHARACŪRṆANIRMĀṆĀVIDHI.⁷⁴³
 JVARAKALPA.⁷⁴⁴
 JVARAKAŚĀYA.⁷⁴⁵
 JVARALAKṢAṆA.⁷⁴⁶
 JVARALAKṢAṆĀDI.⁷⁴⁷
 JVARANIDĀNA.⁷⁴⁸
 JVARAPADDHATĪ.⁷⁴⁹
 JVARAPATHYĀPATHYAVIDHI.⁷⁵⁰
 JVARAPRATĪKĀRA. See *Jvarāghātamahiman*.
 JVARAROGAKALPA.⁷⁵¹
 JVARAROGAKAPHA.⁷⁵²
 JVARASAMUCCAYA.⁷⁵³
 JVARASAMUCCAYADARPAṆA.⁷⁵⁴
 JVARAŚĀNTI.⁷⁵⁵

JVARAŚĀNTIVIDHI.⁷⁵⁶
 JVARAŚATAŚLOKĪ.⁷⁵⁷
 JVARAUṢADHA.⁷⁵⁸
 JVARĀVALĪ.⁷⁵⁹
 JVARAVIMUKTIDINANIRṆAYA.⁷⁶⁰
 JVARAVIVECANA.⁷⁶¹
 JYOTIṢMATĪKALPA.⁷⁶²
 JYOTSNIKĀ.⁷⁶³
 KĀKAJAṄGHĀKALPA.⁷⁶⁴
 KĀKAPARĪKṢĀ.⁷⁶⁵
 KĀLAJĀNA.⁷⁶⁶
 KĀLAJĀNĀVIDHĀNA.⁷⁶⁷
 KĀLIKĀGRANTHA.⁷⁶⁸
 KĀLAMĀRĪKALPA.⁷⁶⁹
 KALĪṄĀDIGHṚTANIRMĀṆAVIDHI.⁷⁷⁰
 KALKADRAVYASAMUCCAYA.⁷⁷¹
 KALLOLINĪ.⁷⁷²
 KALPABHŪṢANA.⁷⁷³
 KALPACINTĀMAṆĪ.⁷⁷⁴
 KALPADRUMANIGHAṆṬU.⁷⁷⁵
 KALPAKHAṆḌA.⁷⁷⁶
 KALPALATĀ.⁷⁷⁷
 KALPANĀSĀGARA.⁷⁷⁸
 KALPAPRAKARAṆA.⁷⁷⁹
 KALPARATNA.⁷⁸⁰
 KALPASĀGARA.⁷⁸¹
 KALPASAMGRAHA.⁷⁸²
 KALPASĀRA.⁷⁸³
 KALPASINDHU.⁷⁸⁴
 KALPATARU.⁷⁸⁵
 KALPAUṢADHISEVĀDIPRAKĀRA.⁷⁸⁶
 KALPĀVALĪ.⁷⁸⁷
 KALPAVALĪ.⁷⁸⁸
 KALYĀṆAGHṚTA.⁷⁸⁹
 KALYĀṆASAMGRAHA.⁷⁹⁰
 KALYĀṆATANTRA.⁷⁹¹
 KĀMABHŪTA(?).⁷⁹²
 KĀMADHENU.⁷⁹³
 KĀMARATNĀKARA.⁷⁹⁴
 KĀMILĀVYĀDHIMANTRACIKITSĀ.⁷⁹⁵
 KĀṆKĀYANAVAṬAKĀ.⁷⁹⁶
 KĀNTĀPATTRAPARĪKṢĀVIDHĀNA.⁷⁹⁷
 KAṆṬHAVAIDYA.⁷⁹⁸
 KAPARDIKĀKALPA.⁷⁹⁹

KAPHACIKITSĀ.⁸⁰⁰
 KAPHĀTISĀRACIKITSĀ.⁸⁰¹
 KAPILASIDDHĀNTA.⁸⁰²
 KAPIÑJALATANTRA.⁸⁰³
 KAPITTHĀṢṬAKABHĀGAYOJAKAŚŪTRA.⁸⁰⁴
 KARAKAKALPA.⁸⁰⁵
 KĀRAṆĀNUGUṆACIKITSĀKRAMA.⁸⁰⁶
 KARAÑJAKAKALPA.⁸⁰⁷
 KARAÑJAKALPĀDI.⁸⁰⁸
 KARMADĪPAVRṬTI.⁸⁰⁹
 KARMAŚAMBHAVA.⁸¹⁰
 KARMAVIPĀKA.⁸¹¹
 KARMAVIPĀKAKAṆḌA.⁸¹²

KARMAVIPĀKASAṂHITĀ.⁸¹³ This work, in the form of a dialogue between Śiva and Pārvatī, teaches, like the *Vṛddhasūryāraṇasamvāda*, through examples. The text describes the lives of individuals born when the moon is in each of the 108 'feet' or quarter-parts of the nakṣatras, traces their incarnations down to the present one, describes the ripening of their karman in this life, including diseases, and discloses the prāyaścitta or śānti rituals by which they may be cured of their ills. The earliest known MS dates from A.D. 1726.⁸¹⁴

KARMAVIPĀKASŪCĪ.⁸¹⁵
 KARṆAŚŪLACIKITSĀ.⁸¹⁶
 KARṆIKĀDINIRṆAYA.⁸¹⁷
 KARPŪRĀDICŪRṆARACANĀVIDHĀNA.⁸¹⁸
 KARPŪRAPRAKĀŚA.⁸¹⁹
 KĀSANIDĀNA.⁸²⁰
 KĀSĀRASAMUCCAYA.⁸²¹
 KĀSAROGĀDĀNANIDĀNACIKITSĀKRAMA.⁸²²
 KĀSAROGANIDĀNA.⁸²³
 KAŚĀYACIKITSĀ.⁸²⁴
 KAŚĀYACŪRṆAMĀTRĀYOGA.⁸²⁵
 KAŚĀYĀDIPĀKAVIDHI.⁸²⁶
 KAŚĀYĀDIPRAYOGĀH.⁸²⁷
 KAŚĀYARASĀYANĀDINIRŪPAṆA.⁸²⁸
 KAŚĀYĀVIDHĀNĀNI.⁸²⁹
 KĀŚĪRĀJASAṂHITĀ.⁸³⁰
 KAṢṬĀVALĪ.⁸³¹
 KASTŪRĪNIRṆAYA.⁸³²
 KASTŪRĪPARĪKṢĀ.⁸³³

KĀŚYAPASAṂHITĀ⁸³⁴ or *Kāśyapīya Garuḍapañcākṣarīkalpa*.⁸³⁵ a Tantric work on toxicology, related to Nārāyaṇa's *Tantrasārasaṅgraha*.

The treatise, composed in the form of a dialogue between Kāśyapa, called Brahmaputra,⁸³⁶ and his pupil Gautama,⁸³⁷ consists of 853 verses, arranged in thirteen chapters (adhyāya).

The subjects dealt with in these chapters are: (1) ṛṣyādimudrābījapiṇḍasaṃjñāpadādīmantragaṇavidhi, on mantrasāstra; (2) dhyānavidhi; (3) (mantra)vinīyogavidhi, i.e., rules on the application of mantras for various purposes, many of which belong to the realm of ṣaṭkarman, such as śānti, puṣṭi, rakṣā, vāśya, ākarṣaṇa, vijaya, uccāṭana, etc.;⁸³⁸ among the diseases to be counteracted mention is made of jvara, rājayakṣman, prameha, mahodara, gulma, śūla, masūrikā, visarpikā, and raktasrāva, as well as of disorders occurring in domestic animals (3.12–16); (4) nāgopadravādīlakṣaṇavidhi, on the five types of poison (4.3cd–4ab),⁸³⁹ the eight chiefs of the nāgas (divyoraga; 4.6 and 8–19), and the four classes of ordinary (prākṛta) snakes (darvīkara, maṇḍalin, rājila and vaitaka; 4.7 and 20–26ab),⁸⁴⁰ their bites, the characteristics of these bites and their symptoms (4.41–62), and finally the seven stages of the effect of poisons (viṣavega; 4.63–68); (5) viṣasaṃhārādīmantrayantraprayogavidhi, on counteracting the effects of poisons by means of mantras and yantras; (6) sarpakṛdālakṣaṇādividhi, on the localizations of snake-bites (6.1–7), the collection of drugs (6.8–19), the attraction of serpents into one's presence by magic formulae (nāgākṛṣṭi; 6.20–35), their eradication (uccāṭana; 6.36–48), and other forms of 'play' (krīḍā) with serpents; (7) on mantras destroying the effect of snake venom; (8) darvīkaraviṣacikitsā, on the bites of darvīkara snakes, their symptoms and treatment; (9) maṇḍaliviṣacikitsā, the same with respect to maṇḍalin snakes; (10) rājilaviṣacikitsā, the same with respect to rājila snakes; (11) mūṣikacikitsā, on the bites of rats and their treatment; (12) viṣṣatīvidhanānāviṣacikitsā, on the treatment of the bites of the twenty kinds of spiders (12.1–11ab), the bites of scorpions (12.11cd–17ab), asses, horses, tigers, bears, cats, etc., (12.21cd–42), sthāvaraviṣa (12.43–58), dūṣīviṣa (12.59–60), hemaviṣa (12.61), and bhallātakaviṣa (12.62);⁸⁴¹ (13) abhiṣekayantradhāraṇavidhi, on consecration and the worship of yantras.

Some parts of the *Kāśyapasaṃhitā* are very similar to or almost identical with chapters of Nārāyaṇa's *Tantrasārasaṃgraha*.⁸⁴²

The author of the work is unknown. Its date cannot be established with certainty and depends on that of the *Tantrasārasaṃgraha*.

KĀŚYAPASAMHITĀ.⁸⁴³

KĀŚYAPASAMHITĀ.⁸⁴⁴

KĀŚYAPASAMHITĀ.⁸⁴⁵

KĀŚYAPĪYAROGANIDĀNA.⁸⁴⁶

KAṬUKAROHINĪKALPA.⁸⁴⁷

KAUTUKACINTĀMAṆI.⁸⁴⁸

KAUTUKANIRŪPAṆA(?) or *Kautukaprayoga*(?).⁸⁴⁹

KAUTUKARATNĀVALI.⁸⁵⁰

KAUTUKASĀRODDHĀRA or *Rājavinoda*.⁸⁵¹

KAUTUKAYOGA.⁸⁵²

KĀYĀGNIRAKṢAṆA.⁸⁵³

KEŚARAÑJANA.⁸⁵⁴
 KHALVALAKṢAṆAVICĀRA.⁸⁵⁵
 KHAṆḌĀMALAKAMĀTULUṄGARASĀYANANIRMĀṆAVIDHI.⁸⁵⁶
 KIRĀTA.⁸⁵⁷
 KOLAHASAMHITĀ.⁸⁵⁸
 KRAVYĀDIVYĀKHYĀNA.⁸⁵⁹
 KRIYĀKALĀPAGUṆOTTARA.⁸⁶⁰
 KRṢṆADHATTŪRAKALPA.⁸⁶¹
 KRṢṆAGUṆAPĀTHA.⁸⁶²
 KRṢṆAHARIDRĀKALPA.⁸⁶³
 KRṢṆĀMALAKAGOPĪCŪRNA.⁸⁶⁴
 KRṢṆĀPARĀJITĀKALPA.⁸⁶⁵
 KRTRIMAKOLĀHALA.⁸⁶⁶
 KRTRIMANIDĀNA.⁸⁶⁷
 KṢĀRAKAUTUKĪ.⁸⁶⁸
 KṢAYACIKITSĀ.⁸⁶⁹
 KṢAYAMEHALAKṢAṆA.⁸⁷⁰
 KṢAYANIDĀNACIKITSĀ.⁸⁷¹
 KṢAYAROGANIDĀNA.⁸⁷²
 KṢĪNASVASTHAVĀTAPITTAŚLEṢMALAKṢAṆA.⁸⁷³

KUCIMĀRATANTRA:⁸⁷⁴ a short Tantric treatise on vājīkaraṇa and related subjects.

The work consists of about 165 verses, arranged in eight chapters (paṭala), to which a pariśiṣṭa of six verses has been added.

After a maṅgala and a verse enumerating the subjects of the treatise, chapter one gives recipes which increase the size and firmness of the penis in men and those of the breasts and buttocks in women; some of the formulae also mention an increase of the size of the ears and arms. Chapter two describes the preparation of ointments which promote sexual pleasure in both partners. Chapter three is about vaśīkaraṇa (subjugation, i.e., making women into willing partners in sexual intercourse) of women of various types⁸⁷⁵ and mantras to be muttered in order to achieve this end; powders to be scattered over the head and potions with the same effect are also described. Chapter four is about vājīkaraṇa (aphrodisiacs), chapter five about drāvaṇa (the captivation of women) and stambhana (recipes which delay or prevent ejaculation), chapter six about kanyākaraṇa (tightening of the vagina), chapter seven about vandhyākaraṇa (abortifacients and contraceptives), and chapter eight about lomaśātana (recipes which make the vulvar region glabrous) and prasava (recipes which ensure impregnation). The pariśiṣṭa verses contain a lomanāśana recipe (which removes pubic hair) and two formulae which assure the birth of a son, even in an infertile woman.

Kucumāra is referred to in Vātsyāyana's *Kāmasūtra* (1.1.12) as the expounder of the seventh section, called Aupaniṣadika, of Bābhavya's abbreviated version of the original *Kāmasūtra*.⁸⁷⁶

Noteworthy is the use of the terms indrī for penis (4.13) and setaka⁸⁷⁷ for a particular weight or measure (7.5). A few vernacular words are employed to designate

medicinal plants, for example, kalaujī (7.14) and kāyaphala (7.14).

No particulars are known with regard to the author and the date of the work.

- KUṆCALĀVAṬIKĀ.⁸⁷⁸
 KUṆḌALĪPHALASĀRALEHYAVIDHĀNA.⁸⁷⁹
 KŪṢMĀṆḌAGHṚTANIRMĀṆAVIDHI.⁸⁸⁰
 KUṢṬHACIKITSĀ.⁸⁸¹
 KUṬAJĀDILEHYAVIDHI.⁸⁸²
 KVĀTHĀDHĪKĀRA.⁸⁸³
 KVĀTHASAMGRAHA.⁸⁸⁴
 LAGHUCIKITSĀ.⁸⁸⁵
 LAGHUCIKITSĀCINTĀMAṆI.⁸⁸⁶
 LAGHUCIKITSĀSĀRA.⁸⁸⁷
 LAGHURATNĀKĀRA.⁸⁸⁸
 LAGHUSAMGRAHA.⁸⁸⁹
 LAGHUVAIDYA.⁸⁹⁰
 LAGHUVAIDYASĀRA.⁸⁹¹
 LAKṢMAṆĀKALPA.⁸⁹²
 LAṆGHANALAKṢAṆA.⁸⁹³
 LĀṆGŪLĪKALPA.⁸⁹⁴
 LEHACINTĀMAṆI.⁸⁹⁵
 LEHYAGHṚTASĀRA.⁸⁹⁶
 LEHYAVIDHĀNA.⁸⁹⁷
 LIṆGADRĀVAKARAUṢADHANIRMĀṆA.⁸⁹⁸
 MADAMŪRCHĀROGANIDĀNACIKITSĀ.⁸⁹⁹
 MADANANIGHAṆṬU.⁹⁰⁰
 MĀDHAVANIDĀNĀNUSĀRACIKITSĀ.⁹⁰¹
 MADHUKARAKALPA.⁹⁰²
 MADHURACIKITSĀ.⁹⁰³
 MADHUSNEHARAŚĀYANAKRAMA.⁹⁰⁴
 MADHUSNUHIRASĀYANAVIDHI.⁹⁰⁵
 MAHĀNĀRĀYAṆATAILAVIDHI.⁹⁰⁶
 MAHĀPAṆCĀRKATAILAVIDHĀNA.⁹⁰⁷
 MAHĀRALAPĀDIYOGA.⁹⁰⁸
 MAHĀROGANĀMĀVALI.⁹⁰⁹
 MAHAUṢADHAPRAVAṆĀŚIRVĀDA.⁹¹⁰
 MAHAUṢADHINIRMĀṆOPAYOGAVICĀRA.⁹¹¹
 MAHĀVYĀDHINIVĀRAKAUṢADHANIRMĀṆAVIDHI.⁹¹²
 MAHODARAUṢADHAVIDHI.⁹¹³
 MALAKAṆGANĪVIDHI.⁹¹⁴
 MALAMAVIDHI.⁹¹⁵
 MALAMŪTRAPARĪKṢĀ.⁹¹⁶
 MALAYĀLAVAIIDYA.⁹¹⁷
 MALŪKACANDRIKĀ.⁹¹⁸

- MĀMSAMAṆḌŪRAPĀTHĀVAKRAHARĪTAKĪNIRMĀṆAVIDHI.⁹¹⁹
 MĀṆḌALYĀDILEHYAYOGA.⁹²⁰
 MAṆḌŪKABRAHMAKALPA.⁹²¹
 MAṆḌŪKABRĀHMĪKALPA.⁹²²
 MAṆḌALAVIDYĀ.⁹²³
 MAṆIPARĪKṢĀDĪNĪ.⁹²⁴
 MAṆJARĪ.⁹²⁵
 MANORAMĀ.⁹²⁶
 MANORAMAYOGAGRANTHA.⁹²⁷
 MANTRACIKITSĀ.⁹²⁸
 MANTRATANTRAUṢADHACIKITSĀ.⁹²⁹
 MĀRJĀRĪKALPA.⁹³⁰
 MARMACIKITSĀ.⁹³¹
 MASŪRIKĀŚĪTALĀDHĪKĀRA.⁹³²
 MAYŪRĀŚIKHĀKALPA.⁹³³
 MEHABHEDAPRABHEDĀDĀNANIDĀNA.⁹³⁴
 MEHACIKITSĀ.⁹³⁵
 MEHANIDĀNA.⁹³⁶
 MEHĀNTAKACŪRṆAVIDHĀNA.⁹³⁷
 MEHAROGANIDĀNA.⁹³⁸
 MEHAUṢADHAPATHYAVICĀRA.⁹³⁹
 MEHAVYĀDHYAUṢADHANIRMĀṆAKRAMA.⁹⁴⁰
 MODAKĀRṆAVA.⁹⁴¹
 MOHINYAUṢADHAVIDHI.⁹⁴²
 MṚTASAMJĪVANĪ.⁹⁴³
 MṚTAVATSĀCIKITSĀ.⁹⁴⁴
 MṚTYUVICĀRA.⁹⁴⁵
 MUKTĀKALPA.⁹⁴⁶
 MŪLIKĀHARAṆĀPADDHATĪ.⁹⁴⁷
 MŪLIKĀNUKRAMAṆĪKĀ.⁹⁴⁸
 MŪLIKĀPRAKARAṆA.⁹⁴⁹
 MŪLIKĀSIDDHISAMGRAHA.⁹⁵⁰
 MUṆḌĪKALPA.⁹⁵¹
 MUṆḌĪKALPĀDI.⁹⁵²
 MŪṢAKADAṢṬAVIṢAUṢADHA.⁹⁵³
 MUSALĪKALPA.⁹⁵⁴
 MUṢṬISAMGRAHA.⁹⁵⁵
 MŪTRĀDIPARĪKṢĀ.⁹⁵⁶
 MŪTRAKṚCCHRACIKITSĀ.⁹⁵⁷
 MŪTRAKṚCCHRACIKITSĀDI.⁹⁵⁸
 MŪTRAKṚCCHRANIDĀNA.⁹⁵⁹
 MŪTRAKṚCCHRAUṢADHANIRMĀṆAKRAMA.⁹⁶⁰
 MŪTRAPARĪKṢĀ.⁹⁶¹
 MŪTRATAILAPARĪKṢĀ.⁹⁶²

- NĀGĀRJUNAGUṬIKĀVIDHĀNA.⁹⁶³
 NAKṢATRANIRNAYA.⁹⁶⁴
 NĀMAGUṆASĀRASAMGRAHA.⁹⁶⁵
 NĀMARATNĀKARANIGHAṆṬU.⁹⁶⁶
 NĀMĀVALĪ, also called *Oṣadhināmamālā* and *Vaidyanāmamālā*.⁹⁶⁷
 NĀNĀGHRĪTALEHYATAILANIRMĀṆAVIDHI.⁹⁶⁸
 NĀNĀKAṢĀYAKALKANIRMĀṆAKRAMA.⁹⁶⁹
 NĀNĀRASAVIVEKA.⁹⁷⁰
 NĀNĀROGACIKITSĀ.⁹⁷¹
 NĀNĀROGACIKITSĀKRAMA.⁹⁷²
 NĀNĀROGAMANTRAUṢADHACIKITSĀKRAMA.⁹⁷³
 NĀNĀROGAŚĀNTI.⁹⁷⁴
 NĀNĀROGAUṢADHANIRMĀṆATATPRAYOGAVIVARAṆA.⁹⁷⁵
 NĀNĀROGAUṢADHĀNUPĀNAPATHYAVICĀRA.⁹⁷⁶
 NĀNĀŚĀSTRA.⁹⁷⁷
 NĀNĀTAILANIRMĀṆATADUPAYOGAVIDHI.⁹⁷⁸
 NĀNĀTAILANIRMĀṆAVIDHĀNA.⁹⁷⁹
 NĀNAUṢADHANIRMĀṆAVIDHĀNA.⁹⁸⁰
 NĀNAUṢADHATADUPAYOGAVIDHI.⁹⁸¹
 NĀNAUṢADHAVIDHI.⁹⁸²
 NĀNAUṢADHOPAYOGAVIDHĀNA.⁹⁸³
 NĀNĀVIDHAUṢADHA.⁹⁸⁴
 NĀNĀVIDHAUṢADHAKALPA.⁹⁸⁵
 NĀNĀVIDHAVAIḌYA.⁹⁸⁶
 NĀNĀVYĀDHICIKITSĀ.⁹⁸⁷
 NĀNĀVYĀDHICIKITSĀVIDHĀNA.⁹⁸⁸
 NĀNĀVYĀDHIMANTRAUṢADHACIKITSĀVIDHI.⁹⁸⁹
 NĀNĀYURVEDA.⁹⁹⁰
 NĀRĀYAṆAKALKAVIDHĀNA.⁹⁹¹
 NĀRIKELĀṆJANA.⁹⁹²
 NASYADHŪPAVICĀRA.⁹⁹³
 NASYAVIDHI.⁹⁹⁴
 NAVAKAPARĪKṢĀ.⁹⁹⁵
 NAVAPATTRACIKITSĀ.⁹⁹⁶
 NAYABODHIKĀ.⁹⁹⁷
 NAYANASUKHA.⁹⁹⁸
 NETRACANDRODAYA.⁹⁹⁹
 NETRĀMAYAVICĀRA.¹⁰⁰⁰
 NETRĀṆJANAVIDHI.¹⁰⁰¹
 NETRAROGACIKITSĀ.¹⁰⁰²
 NETRAROGANIDĀNA.¹⁰⁰³
 NETRATAILANIRMĀṆAVICĀRA.¹⁰⁰⁴
 NETRAVAIDYA.¹⁰⁰⁵
 NIDĀNA.¹⁰⁰⁶

NIDĀNACIKITSĀ.¹⁰⁰⁷
 NIDĀNAGRANTHA.¹⁰⁰⁸
 NIDĀNAMAÑJARĪ.¹⁰⁰⁹
 NIDĀNASAMGRAHA.¹⁰¹⁰
 NIDĀNASĀRA.¹⁰¹¹
 NIDĀNASĀRASAMGRAHA.¹⁰¹²
 NIDĀNASŪTRA.¹⁰¹³
 NIDĀNAṬĪKĀ.¹⁰¹⁴
 NIDĀNAVIṢAYA.¹⁰¹⁵
 NIDĀNAVṚTTAMĀṆIKYAMĀLĀ.¹⁰¹⁶
 NIDĀNAVYĀKHYĀ.¹⁰¹⁷
 NIDĀNAYOGARATNĀVALĪ.¹⁰¹⁸
 NIGHAṆṬU.¹⁰¹⁹
 NIGHAṆṬUDARPAṆA.¹⁰²⁰
 NIGHAṆṬUMĀLĀ.¹⁰²¹
 NIGHAṆṬUNĀMĀVALĪ or -āvali.¹⁰²²
 NIGHAṆṬUSAMGRAHA.¹⁰²³
 NIGHAṆṬUSĀRA.¹⁰²⁴
 NIGHAṆṬUSĀSTRA.¹⁰²⁵
 NIGHAṆṬUVAIDYAKA.¹⁰²⁶
 NIGHAṆṬUVAIDYAKASĀSTRA.¹⁰²⁷
 NĪLAKAṆṬHAVAIDYAKA.¹⁰²⁸
 NĪMBAKALPA.¹⁰²⁹
 NIRGUṆḍĪKALPA.¹⁰³⁰
 NIṢKAPRAMĀṆANIRNAYA.¹⁰³¹
 NṚSIMHASAMHITĀ.¹⁰³²
 NŪTANAKALPA.¹⁰³³
 NŪTANAVIDHI.¹⁰³⁴
 OṢADHIKALPA.¹⁰³⁵
 OṢADHIKOŚA.¹⁰³⁶
 OṢADHINĀMAMĀLĀ.¹⁰³⁷
 OṢADHINĀMĀNI.¹⁰³⁸
 OṢADHINIGHAṆṬU.¹⁰³⁹
 PADĀRTHABODHA.¹⁰⁴⁰
 PADĀRTHAGUṆACINTĀMAṆĪ.¹⁰⁴¹
 PADĀRTHAŚUDDHI.¹⁰⁴²
 PADĀRTHAVIJÑĀNA.¹⁰⁴³
 PADYĀMṚTAMĀLĀ.¹⁰⁴⁴
 PAITYABHEDĀḤ.¹⁰⁴⁵
 PAITYAROGĀDĀNANIDĀNA.¹⁰⁴⁶
 PALĀŚAKALPA.¹⁰⁴⁷
 PĀMĀCIKITSĀ.¹⁰⁴⁸
 PĀNAVIDHI.¹⁰⁴⁹

- PAÑCAKARMAVICĀRA. ¹⁰⁵⁰
 PAÑCAKARMAVIDHI. ¹⁰⁵¹
 PAÑCAMAVILĀSA. ¹⁰⁵²
 PAÑCĀNGANIMBAKALPA. ¹⁰⁵³
 PAÑCANIDĀNAṬIPPANĪ. ¹⁰⁵⁴
 PAÑCĀRKATAILANIRMĀNAVIDHI. ¹⁰⁵⁵
 PAÑCAŚATAYOGĀḤ. ¹⁰⁵⁶
 PAÑCĀṢṬAKARMAṆOR VICĀRAḤ. ¹⁰⁵⁷
 PAÑCAVIṢṢAKAṬĪKĀ. ¹⁰⁵⁸
 PĀṆḌUROGACIKITSĀ. ¹⁰⁵⁹
 PĀṆḌUROGĀDĀNACIKITSĀ. ¹⁰⁶⁰
 PĀṆḌUROGANIDĀNA. ¹⁰⁶¹
 PARĀKṚTA-(PRĀKṚTA-?)VAIDYĀDIGUṬĪKĀ. ¹⁰⁶²
 PARAṆGYĀDICŪRṆAVIDHI. ¹⁰⁶³
 PARIBHĀṢĀ. ¹⁰⁶⁴
 PARICAYAMUKTĀVALĪ. ¹⁰⁶⁵
 PĀRIJĀTANIBANDHA. ¹⁰⁶⁶
 PĀRIJĀTAŚUNTHĪ. ¹⁰⁶⁷
 PARĪKṢĀSĀRA. ¹⁰⁶⁸
 PARĪKṢĀVIDHĀNA. ¹⁰⁶⁹
 PARIMALAPĀRIJĀTA. ¹⁰⁷⁰
 PARYĀYAMAÑJARĪ. ¹⁰⁷¹
 PARYĀYAMUKTĀVALĪ or *Muktāvalī*. ¹⁰⁷²
 PARYĀYAPĀṬHA. ¹⁰⁷³
 PARYĀYARATNAMĀLĀ. ¹⁰⁷⁴
 PARYĀYĀRṆAVA. ¹⁰⁷⁵
 PĀṬADĀ. ¹⁰⁷⁶
 PĀTAÑJALATANTRA. ¹⁰⁷⁷
 PĀṬHĀKALPA. ¹⁰⁷⁸
 PĀṬHĀTAKRAHARĪTAKĪYOGA. ¹⁰⁷⁹
 PĀṬHAUṢADHI. ¹⁰⁸⁰
 PATHYĀPATHYA. ¹⁰⁸¹
 PATHYĀPATHYA, DHANVANTARĪYA-. ¹⁰⁸²
 PATHYĀPATHYADEŚAVICĀRA. ¹⁰⁸³
 PATHYĀPATHYĀDHIKĀRA. ¹⁰⁸⁴
 PATHYĀPATHYĀDINIRṆAYA. ¹⁰⁸⁵
 PATHYĀPATHYADRAVYAGUNAVARNANA. ¹⁰⁸⁶
 PATHYĀPATHYANIGHANṬA. ¹⁰⁸⁷
 PATHYĀPATHYANIGHANṬU. ¹⁰⁸⁸
 PATHYĀPATHYANIRṆAYA. ¹⁰⁸⁹
 PATHYĀPATHYASAMGRAHA. ¹⁰⁹⁰
 PATHYĀPATHYASARVAROGĀDHIKĀRA. ¹⁰⁹¹
 PATHYĀPATHYAVARGA. ¹⁰⁹²

PATHYĀPATHYAVICĀRA.¹⁰⁹³

PATHYĀPATHYAVIDHĀNA.¹⁰⁹⁴

PATHYĀPATHYAVIDHI.¹⁰⁹⁵

PATHYĀPATHYAVINIŚCAYA,¹⁰⁹⁶ a compilation on beneficial (pathya) and harmful (apathya) therapeutic measures, diet, etc., in various diseases.

After a series of introductory verses and an exposition on the purpose of the book and its subjects, including general observations on the nature and importance of pathya and apathya, the author proceeds to describe beneficial and harmful therapeutic measures in a long series of diseases, arranged in the same order as in the *Cakradatta*.¹⁰⁹⁷ The elements of therapy discussed are not restricted to articles of diet and drugs, but also comprise pañcakarman, bloodletting, cauterization, surgical interventions, etc.

Sources are not indicated by the author, but the main source may have been the *Cakradatta*.¹⁰⁹⁸ Some verses have been borrowed from Caraka.¹⁰⁹⁹

The *Pathyāpathyavinīścaya* is said to be quoted by Śivadāśasena; it was extensively used by the author of the *Yogarātnākara*, a work that even quotes the introductory verse with the title of the treatise.¹¹⁰⁰

Some remarkable items of the materia medica are ahipheṇa, kumārī, methī, payaḥ-peṭī,¹¹⁰¹ vajravallī,¹¹⁰² and vijayā.¹¹⁰³

The presence of a number of vegetables and fruits which are prevalent in Bengal, such as hīlamocikā, kañcaṭa, nāḍīca, śālīṛca, and suniṣaṇṇaka, indicates that the treatise was written in that region. Most of the MSS do not mention the name of the author, but some ascribe it to Daśarūpa, Mādhavakara, or Śivadāśa.¹¹⁰⁴

The materia medica points to a period later than the twelfth century. The treatise antedates the fifteenth century if Śivadāśasena was indeed acquainted with it.

PATHYĀPATHYAVIVEKA.¹¹⁰⁵

PATHYAVARGA.¹¹⁰⁶

PATHYAVICĀRA.¹¹⁰⁷

PATHYAVIDHĀNA.¹¹⁰⁸

PAṬṬIPRAKĀŚA.¹¹⁰⁹

PAUṢṬIKAUŚADHAGUṬIKĀ.¹¹¹⁰

PĪNASALAKṢAṆACIKITSĀVIDHI.¹¹¹¹

PIṆḌASIDDHI.¹¹¹²

PIṆḌOPANIṢAD.¹¹¹³ This Upaniṣad describes how a new human being arises thanks to the offering of piṇḍas to a deceased ancestor. The first piṇḍa results in the formation of the kalās of the new body, the second in the formation of muscles (māṃsa), skin and blood; the third piṇḍa makes the mati arise, the fourth causes the formation of bones and bone marrow, the fifth the formation of hands, fingers, head and mouth, the sixth the formation of heart, throat and palate; the seventh piṇḍa endows the new being with āyus; the eighth gives it a voice, the ninth endows it with all the senses, and the tenth with the bhāvas.

- PIṆḌOTPATTISAMGRAHA. ¹¹¹⁴
 PIPPALYĀDIGHRṬA. ¹¹¹⁵
 PIPPALYĀDIRASĀYANA. ¹¹¹⁶
 PIŚĀCAVIJAYA. ¹¹¹⁷
 PITTAJVARAKAŚĀYAVIDHĀNA. ¹¹¹⁸
 PITTĀTISĀRACIKITSĀ. ¹¹¹⁹
 PITTAVĀYUVINĀŚAKACŪRṆA. ¹¹²⁰
 PRABHĀVATĪGUTĪKĀKĀLPA. ¹¹²¹
 PRABHĀVATĪKĀLPA. ¹¹²²
 PRABHĀVATĪMĀTRĀVIDHI. ¹¹²³
 PRABHĀVATĪVĀTAKAVIDHI. ¹¹²⁴
 PRABHĀVATĪVARTIVIṢAMAŚĪTAILAVIDHĀNA. ¹¹²⁵
 PRADARAROGACIKITSĀVIDHI. ¹¹²⁶
 PRAKĪRṆAKAPADYĀDI. ¹¹²⁷
 PRAKĪRṆAVIDYASAMGRAHA. ¹¹²⁸
 PRĀKRṬACIKITSĀRṆAVA. ¹¹²⁹
 PRAKRṬILAKṢAṆA. ¹¹³⁰
 PRAKRṬIVIVECANADĪPA. ¹¹³¹
 PRAMEHACIKITSĀ. ¹¹³²
 PRAMEHĀDHĪKĀRA. ¹¹³³
 PRAMEHĀDĪCĪKITSĀ. ¹¹³⁴
 PRAMEHANIDĀNA. ¹¹³⁵
Prāṇasukha. ¹¹³⁶
 PRASAṄGARATNĀVALI. ¹¹³⁷
 PRASAVAVEDANĀPARIHĀRAVIDHI. ¹¹³⁸
 PRASAVAVIKṚTĪŚĀNTI. ¹¹³⁹
 PRASŪTICIKITSĀ. ¹¹⁴⁰
 PRASŪTĪKĀROGANIDĀNA. ¹¹⁴¹
 PRATIMARŚA. ¹¹⁴²
 PRAYOGACINTĀMAṆI. ¹¹⁴³
 PRAYOGAKAṆṬHĀBHARAṆA. ¹¹⁴⁴
 PRAYOGAMĀLĀ. ¹¹⁴⁵
 PRAYOGĀMṚTA. ¹¹⁴⁶
 PRAYOGASĀRA. ¹¹⁴⁷
 PRAYOGAVIJAYASĀRĀVALĪ. ¹¹⁴⁸
 PURĀTANAYOGASAMGRAHA. ¹¹⁴⁹
 PURUṢĀRTHAPRABODHA. ¹¹⁵⁰
 PUṢPADRĀVAKAVIDHĀNA. ¹¹⁵¹
 PŪTANĀVIDHĀNA. ¹¹⁵²
 PUṬAPRAKARAṆA. ¹¹⁵³
 RAHASYAUSADHA. ¹¹⁵⁴
 RĀHUDVĀDASĀBHĀVAPHALA. ¹¹⁵⁵
 RĀJAMĀRTAṆḌA. ¹¹⁵⁶
 RĀJAMṚGĀṆKA. ¹¹⁵⁷

RĀJAVINODA. See *Kautukasāroddhāra*.

RĀJAYAKṢMANIDĀNA. ¹¹⁵⁸

RAKTAGUṆJĀKALPA. ¹¹⁵⁹

RAKTAPITTACIKITSĀ. ¹¹⁶⁰

RAKTAPITTĀDINIDĀNACIKITSĀ. ¹¹⁶¹

RAKTAPITTANIDĀNA. ¹¹⁶²

RAṆAVĪRAPRAKĀŚA. ¹¹⁶³

RASABHEDĪYAPRASTĀRAPRADARŚANA. ¹¹⁶⁴

RASAKRAVYĀDINĀMAKAUṢADHAVIDHĀNA. ¹¹⁶⁵

RASANĀNIGRAHA. ¹¹⁶⁶

RATNĀKARANIGHAṆṬA. ¹¹⁶⁷

RATNĀKARAUṢADHAYOGAGRANTHA. ¹¹⁶⁸

RATNASĀGARA. ¹¹⁶⁹

ROGACIKITSĀ. ¹¹⁷⁰

ROGACIKITSĀNIDĀNA. ¹¹⁷¹

ROGĀDĀNAVIDHĀNA. ¹¹⁷²

ROGAHARADĀNAVACANĀNI. ¹¹⁷³

ROGALAKṢAṆA. ¹¹⁷⁴

ROGALAKṢAṆACIKITSĀ. ¹¹⁷⁵

ROGALAKṢAṆANIDĀNA. ¹¹⁷⁶

ROGAMŪRTINIRNAYA. ¹¹⁷⁷

ROGANAKṢATRAVĀRALAKṢANA. ¹¹⁷⁸

ROGANĀMASAMGRAHA. ¹¹⁷⁹

ROGANIDĀNA. ¹¹⁸⁰

ROGANIRNAYA. ¹¹⁸¹

ROGANIŚCAYA. ¹¹⁸²

ROGĀNTAKAŚĀRA. ¹¹⁸³

ROGAPARĪKṢĀ. ¹¹⁸⁴

ROGAPARĪKṢAṆA. ¹¹⁸⁵

ROGAPRADĪPA. ¹¹⁸⁶

ROGĀRAMBHA. ¹¹⁸⁷

ROGĀRAMBHAPHALA. ¹¹⁸⁸

ROGAŚAKUNAPRCCĪHĀ. ¹¹⁸⁹

ROGASAMKHYĀ. ¹¹⁹⁰

ROGASAMKHYĀNIDĀNA. ¹¹⁹¹

ROGAŚĀNTI. ¹¹⁹²

ROGAŚUBHĀŚUBHANAKṢATRAVICĀRA. ¹¹⁹³

ROGATANNIDĀNAUṢADHĀNUPĀNASĀRA. ¹¹⁹⁴

ROGAUṢADHACIKITSĀ. ¹¹⁹⁵

ROGAUṢADHACIKITSĀVIDHĀNA. ¹¹⁹⁶

ROGAUṢADHADRAVYANĀMASAMUCCAYA. ¹¹⁹⁷

ROGAUṢADHAVICĀRA. ¹¹⁹⁸

ROGĀVALĪ. ¹¹⁹⁹

ROGĪPARĪKṢĀ. ¹²⁰⁰

ROGOTPATTINAKṢATRAṆIRŪPAṆA. ¹²⁰¹
 ROGOTPATIPĀPACIKITSĀVIṢAYA. ¹²⁰²
 RŚYAŚRṆGASAMHITĀ. ¹²⁰³
 RŚYAŚRṆGATANTRA. ¹²⁰⁴
 ṚTUCARYĀ. ¹²⁰⁵
 ṚTUGUṆA. ¹²⁰⁶
 ṚTULAKṢANA. ¹²⁰⁷
 ṚTUNĪTI. ¹²⁰⁸
 ṚTUSAMHĀRA. ¹²⁰⁹
 RUCIVADHŪGALARATNAMĀLĀ. ¹²¹⁰
 RUDANTĪKALPA. ¹²¹¹
 RUDANTYĀDIKALPA. ¹²¹²
 RUDRADATTA. ¹²¹³ A *Rudradatta* is referred to in the *Amṛtasāgara*.
 RUDRĀKṢAKALPA. ¹²¹⁴
 RUKPRATIKRIYĀ. ¹²¹⁵
 ŚABDARATNAPRADĪPA. ¹²¹⁶
 SĀDHYĀSĀDHYAMAHĀROGALAKṢANACIKITSĀ. ¹²¹⁷
 SĀDHYĀSĀDHYAPARĪKṢĀ. ¹²¹⁸
 SĀDHYĀSĀDHYASVARŪPA. ¹²¹⁹
 ŚAḌRASARATNAMĀLĀ. ¹²²⁰
 SADVAIDYAJĪVANA. ¹²²¹
 SADVAIDYARATNĀKARA. ¹²²²
 SAHADEVĪKALPA. ¹²²³

SAHASRAYOGA. ¹²²⁴ This anonymous treatise, very popular among the vaidyas of Kerala, consists of a collection of recipes. ¹²²⁵

The majority of the recipes are in Sanskrit, but about one hundred and twenty of them (in ed. c) are in a mixture of Sanskrit and Malayāḷam, called *maṇipravāḷam*. ¹²²⁶

The *Sahasrayoga* employs a Malayāḷam technical term for one of the stages of what is called *snehapāka*; this term, *cēḷipāka*, is explained by N.S. Mooss. ¹²²⁷

The formulae are for the larger part of an āyurvedic type, but *rasayogas* are found too. ¹²²⁸

The order of the diseases against which the formulations are effective is partly in agreement with the arrangement of the *Mādhavanidāna* in ed. b. ¹²²⁹ The arrangement of the diseases is largely in conformity with the *Mādhavanidāna* from *jvara* up to *mūtrakṣcchra*. Deviations in this section are: additional chapters on *jvarātisāra*, *viṣūci* and *udāvarta*, a chapter on *hṛdroga* between those on *rājayakṣman* and *śvāsa-kāsa*, a chapter on *sthaulya* between those on *śvāsa-kāsa* and *hikkā*, a chapter on *kuṣṭha* between those on *vātarakta* and *śūla*. The chapters after that on *mūtrakṣcchra* deal with: *vṛddhi*, *aśṛgdara*, *garbhīṇiroga*, *sūtikāroga*, *malaśodhana*, *vamana*, *ārtavaśodhana*, *yoniśūla*, *śopha*, *kāmilā*, *maśūrī*, *viṣa*, *vidradhi*, *mahodara*, and *paraṅki*. ¹²³⁰

The second part of edition b consists of prescriptions arranged according to the type of pharmaceutical preparation: *guṭikā* (77 items), *vaṭakādi* (22 items), *cūrṇa* (108 items), *bhasmakṣāra* (19 items), *lehya* (50 items), *aṛiṣṭa* (25 items), *āsava* (20 items),

taila (96 items), and ghṛta (135 items).

After a few chapters with prescriptions to be used in ūrdhvāṅgaroga and śīroroga, and one on the purification (śuddhi) of various medicinal substances, edition b ends with verses on dhārākālpa, which are mostly close to those of Kālidāsa's *Dhārākālpa*, but occasionally borrowed from the *Aṣṭāṅgahṛdayasaṃhitā*,¹²³¹ and a section on nidāna in Malayālam prose.

Edition c differs from ed. b in arranging all the recipes according to the type of pharmaceutical preparation. It consists of a kaṣāyaprakaraṇa (72 recipes),¹²³² ghṛtaprakaraṇa (59 recipes), tailaprakaraṇa (74 recipes), cūrṇaprakaraṇa (92 recipes), to which a section with bhasmakṣārādīyogas is added (14 recipes), aṣṭaprakaraṇa (15 recipes), āsavaprakaraṇa (10 recipes), lehyaprakaraṇa (46 recipes), vaṭīprakaraṇa (16 recipes), guṭīkāprakaraṇa (70 recipes), pariśiṣṭaprakaraṇa (111 recipes), and a second tailaprakaraṇa (44 recipes).¹²³³ The verses on dhārākālpa are absent from this edition.

Noteworthy diseases mentioned in ed. c are: asthisrāva (45), kapālārśas (98), nimnonnatajvara (= viṣamaajvara), phiraṅgaroga (287), somaroga (39, 249).

Noteworthy items of the materia medica of ed. c are:¹²³⁴ aghorī (149),¹²³⁵ agni-jihvā (107),¹²³⁶ agragrāhī (144, 225, 201, 255),¹²³⁷ agrapuṣpī (30), ajihadā (136),¹²³⁸ ākulī (54, 129),¹²³⁹ ālūpaka (90),¹²⁴⁰ āmrāgandhā (312),¹²⁴¹ ānanda (238),¹²⁴² añjhu-dā (100),¹²⁴³ aranyatulasī (10),¹²⁴⁴ arkarāga (254),¹²⁴⁵ āśālī (148),¹²⁴⁶ āvīra (12), bhadrikā (68, 71),¹²⁴⁷ bhūmitāla (32),¹²⁴⁸ bhūpīlu (66), bhūśarkarā (207),¹²⁴⁹ bhūtāla (149),¹²⁵⁰ daśapuṣpa (296),¹²⁵¹ devadhūpa (85),¹²⁵² dhūpapattra (141),¹²⁵³ dhūpikā-sāra (141),¹²⁵⁴ dīnēśavallī (100),¹²⁵⁵ drāmadī (129, 142),¹²⁵⁶ gāndhārī (207),¹²⁵⁷ girimallikā (63),¹²⁵⁸ girimardinī (105),¹²⁵⁹ harikrāntī (4),¹²⁶⁰ hariparnikā (107),¹²⁶¹ haṭha (91, 93),¹²⁶² hirūverikā (27),¹²⁶³ ikṣvā (107), indravallī (91, 107, 149),¹²⁶⁴ jalakandaka (60),¹²⁶⁵ jambāla (236, 240),¹²⁶⁶ jambīrī (78), jvālāmukhī (237),¹²⁶⁷ kaṇṭhivērṇa (140, 147), kanmadavedhin (140),¹²⁶⁸ kannāra (140, 146, 245, 261), kapi (149),¹²⁶⁹ kapota (20),¹²⁷⁰ kāralatikā (107), karuppu (140),¹²⁷¹ kāsaharī (11),¹²⁷² kāviyu (140),¹²⁷³ kerī (= nārikela; 69, 78), khapura (85),¹²⁷⁴ kṛṣṇabījā (207), kuhalī (45, 106), kukūla (107),¹²⁷⁵ kūvā (136),¹²⁷⁶ mahātālakanda (129), mahītāla (129),¹²⁷⁷ maṇḍalaka (78),¹²⁷⁸ mehāri (54),¹²⁷⁹ modaka (144),¹²⁸⁰ modakatvac (45, 46),¹²⁸¹ mṛdukuñcikā (68), nābhi (146, 230),¹²⁸² navasāra (105), nīṅgaṇa (296, 308),¹²⁸³ pārāñkī (147),¹²⁸⁴ pārāñtī (54),¹²⁸⁵ parpaṇa (55), paṣugandhā (130, 132),¹²⁸⁶ paśupāśī (144, 150),¹²⁸⁷ pūṭavṛkṣa (147),¹²⁸⁸ rajatāri (107),¹²⁸⁹ rakṣatikā (107), śakralatā (22, 55),¹²⁹⁰ śakravallārī (86),¹²⁹¹ sannināyaka (140, 147), sphoṭyābhujāṅgama (72), śrīkaṇṭha (84, 93, 139),¹²⁹² suvarṇatṭṇa (148), svarṇāśya (118),¹²⁹³ svastika (44),¹²⁹⁴ takkola (58, 93, 94, 99, 103, 123, 161),¹²⁹⁵ tekarāja (82, 91, 116, 227),¹²⁹⁶ trikaṇā (55),¹²⁹⁷ trikānta (88),¹²⁹⁸ tripādī (11, 304),¹²⁹⁹ triyava (205),¹³⁰⁰ uttamakanyakā (4),¹³⁰¹ vaikuṇṭha (30, 98),¹³⁰² vairī (149),¹³⁰³ varālā (141),¹³⁰⁴ vārḍhipattraka (52),¹³⁰⁵ varṇavatī (107),¹³⁰⁶ varūṇa (51), vibudhataru (130),¹³⁰⁷ viṣṇukrāntī (10, 30),¹³⁰⁸ and yakṣākṣī (22).¹³⁰⁹

Recipes found in the *Sahasrayoga* which have been studied are:¹³¹⁰ daśamūlakatutrayakaṣāya (11),¹³¹¹ veṭṭumāranguṭikā (253).¹³¹²

A not inconsiderable number of the formulae of the *Sahasrayoga* are also found, either in the same form or modified, in other medical works.¹³¹³

A *Sahasrayoga*, *Sahasrayogī*, and *Sahasrayogavyākhyā* are quoted in Anantakumār-

ra's *Yogaratanasamuccaya*. The *Sahasrayoga* is one of the sources of the *Bheṣajasaṃhitā*.

The author and date of the *Sahasrayoga* are unknown.

- SAKALAROGACIKITSĀGRANTHA.¹³¹⁴
 SAKALAROGAGANANĀ.¹³¹⁵
 ŚĀKALASAMHITĀ.¹³¹⁶
 ŚAKUNAPARĪKṢĀDI.¹³¹⁷
 ŚĀLĀKYATANTRA.¹³¹⁸
 ŚĀLMALĪKALPA.¹³¹⁹
 ŚALYATANTRA.¹³²⁰
 SAMASAMBHOJANAVIDHI.¹³²¹
 SAMASTADRAVYĀŚUDDHYAIKAKRAMANIRŪPA.¹³²²
 SAṂDEHABHAṆJANĪ.¹³²³
 SAṂGRAHAṆĪROGACIKITSĀ.¹³²⁴
 SAṂGRAHARATNAMĀLĀ.¹³²⁵
 SAṂGRAHATARAṆGIṆĪ.¹³²⁶
 SAṂJÑĀSAMUCCAYA.¹³²⁷
 SAṂNIPĀTACANDRIKĀ.¹³²⁸
 SAṂNIPĀTACIKITSĀ.¹³²⁹
 SAṂNIPĀTĀDIROGANIDĀNA.¹³³⁰
 SAṂNIPĀTĀJVARANIDĀNA.¹³³¹
 SAṂNIPĀTAKALIKĀ.¹³³²
 SAṂNIPĀTALAKṢAṆA.¹³³³
 SAṂNIPĀTALAKṢAṆACIKITSĀ.¹³³⁴
 SAṂNIPĀTALAKṢAṆĀNI.¹³³⁵
 SAṂNIPĀTANĀḌĪLAKṢAṆA.¹³³⁶
 SAṂNIPĀTANIDĀNA.¹³³⁷
 SAṂNIPĀTANIDĀNA and -CIKITSĀ.¹³³⁸
 SAṂNIPĀTAPĀDACANDRIKĀ.¹³³⁹
 SAṂNIPĀTAPATHYĀPATHYĀDI.¹³⁴⁰
 SAṂNIPĀTAPRAKARAṆA.¹³⁴¹
 SAṂNIPĀTĀRŪPA.¹³⁴²
 ŚAṆḌHĀDHĪKĀRA.¹³⁴³
 ŚAṆḌHASPHUṬAKA.¹³⁴⁴
 SAṆGASAMUCCAYA.¹³⁴⁵
 SANTĀNASROTA.¹³⁴⁶
 SĀRACANDRIKĀ.¹³⁴⁷
 SĀRADĪPIKĀ.¹³⁴⁸
 SĀRAKAUMUDĪ.¹³⁴⁹ See *Cikitsāsārakamudī*.
 SĀRANĀTĀILASĀDHANA.¹³⁵⁰
 SĀRĀṆGALAVANANIRMĀṆAVIDHI.¹³⁵¹
 SĀRANIGHAṆṬU.¹³⁵²
 SĀRASAMGRAHA.¹³⁵³

- SĀRASVATĀBHIDHĀNA. ¹³⁵⁴
 SĀRASVATAGHṚTĀDIYOGA. ¹³⁵⁵
 SARASVATĪCŪRṆAVIDHĀNA. ¹³⁵⁶
 SĀRATILAKA. ¹³⁵⁷
 SĀRĀVALĪ or *Sārāvali*. ¹³⁵⁸
 ŚĀRĪRA. ¹³⁵⁹
 ŚĀRĪRAKĀNUṢṬHEYASĀMĀNYAVICĀRA. ¹³⁶⁰
 ŚĀRĪRANIBANDHASAMGRAHA. ¹³⁶¹
 ŚĀRĪRASAMGRAHA. ¹³⁶²
 ŚĀRĪRAVAIDYA. ¹³⁶³
 ŚĀRṆGADHARASAMGRAHA. ¹³⁶⁴
 SĀRODDHĀRA. ¹³⁶⁵
 SĀRODDHĀRASAMGRAHA. ¹³⁶⁶
 SĀROTTARANIGHAṆṬU. ¹³⁶⁷
 SARPADAṢṢANAMANTRACIKITSĀ. ¹³⁶⁸
 SARPANIRŌDHAMANTRAVIDHI. ¹³⁶⁹
 SARVABHŪTACINTĀŚĀRĪRA. ¹³⁷⁰
 SARVAJANAVAŚYAUSADHA. ¹³⁷¹
 SARVAJVARAKAṢĀYA. ¹³⁷²
 SARVAJVARAVIPĀKA. ¹³⁷³
 SARVAKĀŚABHEṢAJA. ¹³⁷⁴
 SARVĀṆGACIKITSĀ. ¹³⁷⁵
 SARVĀṆJANAKALPA. ¹³⁷⁶
 SARVAPARĪKṢANA. ¹³⁷⁷
 SARVAROGACIKITSĀRĀTNA. ¹³⁷⁸
 SARVAROGACIKITSITA. ¹³⁷⁹
 SARVAROGANIDĀNA. ¹³⁸⁰
 SARVAROGANIVĀRAKAUṢADHAVIDHĀNA. ¹³⁸¹
 SARVASAMGRAHA. ¹³⁸²
 SARVAVAIDYASĀRASAMUCCAYA. ¹³⁸³
 SARVAVIJAYĪTANTRA. ¹³⁸⁴
 SARVAVIṢACIKITSĀ. ¹³⁸⁵
 SARVAVYĀDHICŪRṆAVIDHI. ¹³⁸⁶
 ŚĀŚĀNKAKIRAṆA. ¹³⁸⁷
 ŚĀSTRARĀTNA NIGHAṆṬU. ¹³⁸⁸
 ŚĀTĀDHIKĀṢṬĀŚĪTIPATTRĀNI. ¹³⁸⁹
 ŚĀTAMŪLĀNI. ¹³⁹⁰
 ŚĀTĀŚLOKĪ. ¹³⁹¹
 ŚĀTAUṢADHANĀMĀNI. ¹³⁹²
 ŚĀTAUṢADHĀNI. ¹³⁹³
 ŚĀTAUṢADHAPRATINIDHAYAḤ. ¹³⁹⁴
 ŚĀTAUṢADHAVṚKṢAMŪLANĀMĀNI. ¹³⁹⁵
 ŚĀTĀVARĪTAILANIRMĀNAVIDHI. ¹³⁹⁶
 ŚĀTAYOGAGRANTHA. ¹³⁹⁷

SATKANṬHARATNĀBHARAṆA. ¹³⁹⁸
 ṢAṬTRIMṢALLŪTĀSVARŪPA. ¹³⁹⁹
 SAUBHĀGYACINTĀMAṆI. ¹⁴⁰⁰
 SAUBHĀGYAṢAṆKARĀDI. ¹⁴⁰¹
 SAUBHĀGYAṢUNṬHĪ and PĀRIJĀTAṢUNṬHĪ. ¹⁴⁰²
 SAUBHĀGYAṢUNṬHYĀDICŪRṆAVIDHI. ¹⁴⁰³
 SIDDHAJĪVANATANTRA. ¹⁴⁰⁴
 SIDDHAMŪLIKĀMANTRA. ¹⁴⁰⁵
 SIDDHASĀRASAMGRAHA. ¹⁴⁰⁶
 SIDDHASĀRASAMHITĀ. ¹⁴⁰⁷
 SIDDHASŪRIKALPA. ¹⁴⁰⁸
 SIDDHAUṢADHAMŪLAGRAHAṆAVIDHI. ¹⁴⁰⁹
 SIDDHAUṢADHAPRAKARAṆĀDI. ¹⁴¹⁰
 SIDDHAYOGARATNĀVALĪ or -ratnāvali. ¹⁴¹¹
 SIDDHAYOGASAMGRAHA. ¹⁴¹²
 SIDDHAYOGASAMUCCAYA. ¹⁴¹³
 SIDDHAYOGODAYA. ¹⁴¹⁴
 SIDDHIRASĀYANAKALPA. ¹⁴¹⁵
 ŚĪGHRACIKITSĀ. ¹⁴¹⁶
 ŚĪGHRABODHANIDĀNA. ¹⁴¹⁷
 ŚĪGRUPUṢPARASĀYANAVIDHI. ¹⁴¹⁸
 ŚĪROROGĀDHYĀYA. ¹⁴¹⁹
 ŚĪROROGANIRṆAYA. ¹⁴²⁰
 ŚĪROROGAMANTRACIKITSĀ. ¹⁴²¹
 ŚLEṢMAJVARANIDĀNA. ¹⁴²²
 SNĀYUROGACIKITSĀ. ¹⁴²³
 SNEHAMĀLIKĀ. ¹⁴²⁴
 SPHUṬAVIDYA. ¹⁴²⁵
 ŚRĠĀLAKALPA. ¹⁴²⁶
 ŚRĪPHALAKALPA. ¹⁴²⁷
 STAMBHANAPRAKĀRA. ¹⁴²⁸
 STRĪCIKITSĀMṚTAVILĀSA. ¹⁴²⁹
 STRĪCIKITSĀPADDHATI. ¹⁴³⁰
 STRĪGARBHĀŚŪLACIKITSĀ. ¹⁴³¹
 STRĪROGACIKITSĀ. ¹⁴³²
 STRĪVAIDYA. ¹⁴³³
 STRĪVAŚYAVIDHĀNA. ¹⁴³⁴
 SUGRĪVASAMKARIṆĪVIDYĀ. ¹⁴³⁵
 SUKHĀNANDASŪTRASTHĀNA. ¹⁴³⁶
 SUKHĀNANDAVINODA. ¹⁴³⁷
 SUKHAPRASAVOPĀYAVIDHI. ¹⁴³⁸
 SŪKṢMAPRASĀRA. ¹⁴³⁹
 SULABHAUṢADHASĀDHANA. ¹⁴⁴⁰
 ŚŪLACIKITSĀ. ¹⁴⁴¹

ŚŪLĀDĀNANIDĀNACIKITSĀ. ¹⁴⁴²

ŚUNṬHĪKALPA. ¹⁴⁴³

ŚUNṬHĪRASĀYANAVIDHI. ¹⁴⁴⁴

SŪRAṆĀDIVAṬAKĀ. ¹⁴⁴⁵

SŪRYARĀYĀNDHRANIGHAṆṬU. ¹⁴⁴⁶

SUŚRUTASĀRA. ¹⁴⁴⁷

SUVARṆAPRABHĀSASŪTRA. ¹⁴⁴⁸ This Mahāyānasūtra, ¹⁴⁴⁹ also called *Suvarṇabhāsa-* and *Suvarṇa(pra)bhāsoṭtamasūtra*, contains some important early medical material. The work, originally in Sanskrit, ¹⁴⁵⁰ was translated into Tibetan, ¹⁴⁵¹ Khotanese, ¹⁴⁵² Sogdian, ¹⁴⁵³ Chinese, ¹⁴⁵⁴ Uighur, ¹⁴⁵⁵ and Mongol. ¹⁴⁵⁶

Chapter fifteen, ¹⁴⁵⁷ on Sarasvatī, is about a ritual bath, attended by spells and incantations; many fragrant drugs are mentioned. ¹⁴⁵⁸

Chapter sixteen, ¹⁴⁵⁹ called vyādhīpraśamana, consists of some introductory prose, thirteen verses, and some concluding prose. The introductory prose tells about the śreṣṭhin (foreman of a guild) Jaṭiṇḍhara, ¹⁴⁶⁰ who had been active as a medical practitioner during the reign of king Sureśvara. When Jaṭiṇḍhara had grown old and did no longer practise, which resulted in the reappearance of all kinds of afflictions, his son Jalavāhana approached him with the request to transmit the medical science to him. The metrical part opens with this entreaty. The remaining verses contain Jalavāhana's questions and Jaṭiṇḍhara's answers.

Jalavāhana wants to know why and how the senses (indriya) and elements (dhātu) are subject to changes, and during which periods of the year diseases arise. He also asks when vāta, pitta and kapha are liable to become excited and which medicines are suitable to their pacification.

Jaṭiṇḍhara explains that the year is divided into four main seasons of three months' duration: summer, autumn, winter and spring, or six seasons of two months; the senses and the six elements, as well as the digestive processes, show variations in accordance with the seasons; these periodic changes may lead to disorders, in particular during the transition between one season and the next one.

Diseases due to vāta arise during the rainy season, those due to pitta in the autumn, those due to a combination in the winter, and those due to kapha in the summer. The tastes (rasa) to be preferred in one's diet are therefore: snigdha (fatty), uṣṇa (heating), lavaṇa (salty) and sour (amla) during the rainy season; snigdha, madhura (sweet) and cooling (śīta) during the autumn; madhura, amla and snigdha during the winter; kaṣāya (astringent), uṣṇa and kaṭu (pungent) during the summer. Excitement of kapha occurs shortly after the ingestion of food, excitement of pitta during the digestive processes, excitement of vāta at the completion of digestion. Vāta can be counteracted by bṛmhaṇa measures, ¹⁴⁶¹ pitta by purgatives (virecana), kapha by emetics (vamana).

The concluding prose relates that Jalavāhana, after the acquisition of this knowledge, began to treat those who were suffering from diseases.

The first and second Tibetan translations give a faithful rendering of this summary of the medical art, some slight adaptations excepted: the rainy season, unknown in Tibet, is replaced by the summer, the summer by the season of spring.

The third Tibetan translation is not based on the Sanskrit original, but on I-ching's Chinese version.

The version in Old Khotanese corresponds more or less to the Sanskrit text, but the parts preserved of a translation in Late Khotanese correspond to I-ching's text.

The *Suvarṇaprabhāsa* was translated into Chinese by Dharmakṣema,¹⁴⁶² Paramārtha, Yaśogupta, Pao Kuei, and I-ching.¹⁴⁶³ Dharmakṣema follows the original rather closely.¹⁴⁶⁴ I-ching's translation presents a much longer text;¹⁴⁶⁵ his version of the story about Jaṭiṃdhara and Jalavāhana consists of thirty-seven instead of thirteen verses.

The *Suvarṇaprabhāsa* employs the term dhātu for the doṣas and the elements of the body. The Tibetan translators render the term by kham, the usual equivalent of dhātu.

Dharmakṣema and I-ching had problems with dhātu as a term designating the doṣas. Dharmakṣema interprets dhātu as mahābhūta, and, in agreement with this view, adds that they are four in number.¹⁴⁶⁶ He even changes the Sanskrit text and renders the triad of dhātus (dhātutritaya) by 'the four mahābhūtas', which creates confusion. I-ching agrees with Dharmakṣema in rendering dhātu with the Chinese characters for mahābhūta, but avoids the difficulty presented by dhātutritaya by omitting this word and replacing it by a colourless expression.¹⁴⁶⁷

Vāta, pitta and kapha are translated by wind, heat and water, or by wind, heat and phlegm by Dharmakṣema; I-ching uses heat or yellow heat as the equivalent of pitta.

The term dhātu, when used for the elements of the body, is also interpreted as mahābhūta by Dharmakṣema, although this conflicts with their number. I-ching, who was interested in Indian medicine, was acquainted with the series of seven bodily elements of āyurveda and gives a correct translation of the term.

The Sanskrit text of chapter sixteen of the *Suvarṇaprabhāsa* refers to six elements of the body,¹⁴⁶⁸ which is very remarkable, given the fact that their number is always seven in āyurvedic literature. Unfortunately, the items comprising the series are not listed. I-ching enumerates them in his version and completes the list by adding brain tissue as the seventh element, notwithstanding the fact that āyurvedic works have always śukra (semen) as the last element of the series.

I-ching expanded the verses on the seasons with the names of the six Indian seasons, beginning his list with spring. Both Dharmakṣema and I-ching made, in the same way as the Tibetan translators, some minor changes in the text in order to make the series of four main seasons conform to Chinese climatic conditions.

The views of the *Suvarṇaprabhāsa* on the tastes are very remarkable. The eight tastes it distinguishes are unknown in āyurvedic literature; they are not referred to as representing a heterodox theory in the ātreyaśāstrakāpīya chapter (Sū.26) of the *Carakaśaṃhitā*. The tastes of the *Suvarṇaprabhāsa* are a mixture of the āyurvedic rasas and guṇas. Noteworthy is the absence of the bitter (tikta) taste.

The relationships between the tastes and the four main seasons are largely in agreement with āyurvedic theory, but some discrepancies made Dharmakṣema and I-ching introduce changes in their translations of the pertinent verses.¹⁴⁶⁹

The bṛṃhaṇa remedial measures against vāta diseases are replaced by ghee in the Chinese translations; both Dharmakṣema and I-ching recommend the use of haritakī

as a specific against diseases caused by heat (= pitta).¹⁴⁷⁰

I-ching's translation of the thirteen verses of the *Suvarṇaprabhāsa* consists of twenty-two verses, to which fifteen stanzas are added as an appendix. These stanzas describe the eight branches of āyurveda, the constitutions (prakṛti), signs foreboding death (ariṣṭa), and some important medicinal substances (triphālā, tryūṣaṇa, sugar, honey, ghee, and milk).¹⁴⁷¹

Dharmakṣema translated the *Suvarṇaprabhāsa* between A.D. 414 and 421;¹⁴⁷² I-ching translated it between A.D. 695 and 712.¹⁴⁷³ The Sanskrit text can therefore not be later than the second half of the fourth century.

SUYOGARATNĀVALĪ.¹⁴⁷⁴

SVARASAVIṢAMUṢṬĪ.¹⁴⁷⁵

ŚVETACARMAVYĀDHYAUṢADHAVIDHĀNA.¹⁴⁷⁶

ŚVĒTAGUṆJĀKALPA.¹⁴⁷⁷

ŚVĒTAMUSALĪKALPA.¹⁴⁷⁸

ŚVĒTARIṆGAṆĪKALPA.¹⁴⁷⁹

ŚVĒTĀRKĀDIKALPA.¹⁴⁸⁰

ŚVĒTĀRKAKALPA.¹⁴⁸¹

TAILABHASMARASAUṢADHAVIDHĀNA.¹⁴⁸²

TAILĀBHYAṆGANIRŪNĀYA.¹⁴⁸³

TAILABINDUPARĪKṢĀ.¹⁴⁸⁴

TAILACŪRṆARASĀYANĀDIVIDHĀNA.¹⁴⁸⁵

TAILADHĀRĀVAGĀHANAVIDHI.¹⁴⁸⁶

TAILĀDHIKĀRA.¹⁴⁸⁷

TAILĀDIVIDHISAMGRAHA.¹⁴⁸⁸

TAILALEHYAGHṚTĀDIVIDHĀNA.¹⁴⁸⁹

TAILALEHYAŚUNṬHĪRASĀYANĀNI.¹⁴⁹⁰

TAILAPĀKAVIDHI.¹⁴⁹¹

TAILAPARĪKṢĀ.¹⁴⁹²

TAILAPRAKARAṆA.¹⁴⁹³

TAILAPRAYOGA.¹⁴⁹⁴

TAILARASAVIDHĀNĀNI.¹⁴⁹⁵

TAILĀRṆAVAVIDHI.¹⁴⁹⁶

TAILASAMUCCAYA.¹⁴⁹⁷

TAILAVIDHĀNA.¹⁴⁹⁸

TAILAVIDHI.¹⁴⁹⁹

TAILAYOGĀH.¹⁵⁰⁰

TAILOPAVEŚANAVIDHI.¹⁵⁰¹

TAKRACIKITSĀVIDHI.¹⁵⁰²

TAKRAKALPA.¹⁵⁰³

TAKRAPADDHATI.¹⁵⁰⁴

TAKRAPĀNAVAVIDHI.¹⁵⁰⁵

TAKRASĀDHANĀDIVIDHI.¹⁵⁰⁶

TĀLĪSĀDICŪRṆĀ.¹⁵⁰⁷

TĀLĪSĀDICŪRNAVINIYOGAVIDHI.¹⁵⁰⁸

TĀLĪSAVAṬIKĀVIDHĀNA.¹⁵⁰⁹

TĀMBŪLACARVAṆAVIDHI.¹⁵¹⁰

TĀMBŪLAGUṆĀḤ.¹⁵¹¹

TĀMBŪLAKALPA.¹⁵¹²

TĀMBŪLASĀDHANAVIDHI.¹⁵¹³

TĀMBŪLAVIDHI.¹⁵¹⁴

TANTRASĀRA.¹⁵¹⁵

TANTRAYUKTI.¹⁵¹⁶ The treatise deals with the same thirty-six tantrayuktis as those found in Nīlamegha's *Tantrayuktivivāra*,¹⁵¹⁷ and is based on the latter work as explicitly stated by the author himself.¹⁵¹⁸

The work begins with a series of thirty-one verses in which the whole of Nīlamegha's introduction is incorporated. Indu's *Śaśilekhā* and another, unknown, commentary, called *Avatāṃsa*, are mentioned in these introductory stanzas, which also contain a detailed table of contents, from which, however, the list of tantradoṣas and the portion on leśakalpanā are missing.

The thirty-six tantrayuktis are defined in ślokas,¹⁵¹⁹ accompanied by an auto-commentary which draws heavily on Nīlamegha's work, being partly identical with it, partly original and more extensive. This commentary, preserved only up to yukti ten, quotes, apart from the authorities also mentioned by Nīlamegha, Indu (12) and Aruṇa (12 and 14), while Nīlamegha is repeatedly referred to as Megha.¹⁵²⁰ The exposition on the tantrayuktis is completed by verses elucidating the other tantraguṇas.

The tantrayuktis form part of a system of ninety-five tantraguṇas, elaborately described by Aruṇadatta.¹⁵²¹ Aruṇadatta is followed closely by the author of the *Tantrayukti*, who repeats Aruṇadatta's prose definitions in verse; he adds one item, thus enlarging upon the number and making a total of ninety-six tantraguṇas. The complete series of tantraguṇas consists, apart from the tantrayuktis, of fifteen types of exposition (vyākhyā), described in eleven ślokas (48–49), seven types of arrangement (kalpanā), described in seven ślokas and a half (49), twenty-one types of basic procedure (āśraya),¹⁵²² described in twenty-three ślokas and one gīti (50–52), and finally of a series of seventeen items which begin with tācchīlya, described in nineteen ślokas, one gīti and a half-verse of an unusual type (53–55).

A verse follows in which the author expresses his wish that (his) son Tuṅgamānya may benefit from the exposition of these ninety-six alampkāras.

After quoting Vāgbhaṭa (A.s.U.50.154 and 156–157), the author enumerates fourteen tantradoṣas in four ślokas (55), thus deviating from the series of fifteen doṣas given by Aruṇadatta by omitting one of them, namely bhinnakrama (displacement). A series of eleven verses and a half follows, in which the author praises Nīlamegha, the author of the *Tantrayuktivivāra*, and Bhiṣagārya, who composed the *Abhidhānamañjarī* (56–57). Five verses among these, which describe Nīlamegha's lineage, are taken from the *Abhidhānamañjarī*. The subject of leśakalpanā, one of the seven types of kalpanā, is taken up again at the end of the work; this topic is dealt with in prose, concluded by four verses (57–60). The author repeats the whole of Aruṇadatta's comment on the term, fol-

lowed by his own exposition in prose, in which he quotes from the *Śivadharmottara*¹⁵²³ and an authority called Kālaavedin; the chief terms discussed are (a) *niyatāyus*, (a) *kā-lamṛtyu*, and *apamṛtyu*.¹⁵²⁴

The author of the *Tantrayukti* seems to have belonged to the same lineage as Nīlamegha and Bhiṣagārya, or he was a pupil of one of the descendants of this famous line of South Indian physicians.

The author is later than Nīlamegha and Bhiṣagārya, to whom he refers.

TANTROKTACIKITSĀ.¹⁵²⁵

TANTROKTAUṢADHASAMGRAHA.¹⁵²⁶

TARKABHĀṢĀ.¹⁵²⁷

TRAYASTRIṢADGAṆAPĀTHA.¹⁵²⁸

TRAYODAŚASAMNIPĀTACIKITSĀ.¹⁵²⁹

TRAYODAŚASAMNIPĀTAKALIKĀCIKITSĀ.¹⁵³⁰

TRIBHUVANATILAKA.¹⁵³¹

TRIDOṢANIDĀNA.¹⁵³²

TRIDOṢAPRAŚAMANAUṢADHA.¹⁵³³

TRIPHALĀCŪRṆAVIDHĀNA.¹⁵³⁴

TRIPHALĀKALPA.¹⁵³⁵

TRIVARGAŚRĪPHALĀDINIGHAṆṬU.¹⁵³⁶

TRṆAJYOTIKALPA.¹⁵³⁷

TRṆAJYOTIṢMATĪKALPA.¹⁵³⁸

TRYAMBAKĪPRĀKRṬA.¹⁵³⁹

UDAKALAKṢAṆA.¹⁵⁴⁰

UDARAROGABHEDAPRABHEDANIDĀNACIKITSĀ.¹⁵⁴¹

UDARAROGACIKITSĀVIDHI.¹⁵⁴²

UDARAVYĀDHICIKITSĀ.¹⁵⁴³

The *UḍḍīṣATANTRA*¹⁵⁴⁴ is a Tantric text on magic,¹⁵⁴⁵ sometimes ascribed to Rāvaṇa, which also appears under other titles. Four versions can be distinguished: (1) *Uḍḍāmaratantra*, a dialogue between Śiva and Pārvatī, (2) *Uḍḍīṣatantra* or *Rāvaṇoḍḍīṣa*, in the form of a conversation between Śiva and Rāvaṇa, (3) *Virabhadratantra*, and (4) *Kriyodḍīṣatantra*.

One of the printed versions of the *Uḍḍīṣatantra*¹⁵⁴⁶ is a treatise on *ṣaṭkarman*¹⁵⁴⁷ in 378 verses, to which a number of mantras have been added. It consists of a dialogue between Śiva and Rāvaṇa and has been arranged in ten chapters. The order of these ten chapters does not agree with the table of contents found in chapter one (1.20–27), where eight chief subjects are enumerated: *karṣaṇa*, *unmādana*, *vidveṣaṇa*, *uccāṭana*, *grāmakasyocāṭana*, *jalastambha*, *stambhana*, and *vājīkaraṇa*, followed by a long list of secondary subjects.

The topics dealt with in the ten chapters are: *māraṇa* (1), *mālānirṇaya* and *dhānyādināśa* (2), *mohana* (3), *stambhana* (4), *vidveṣaṇa* (5), *uccāṭana* (6), *vaśīkaraṇa* and *drāvaṇa* (7), *ākaraṣaṇa* (8), *yakṣiṇīśādhana* (9),¹⁵⁴⁸ and *indrajāla* (10).¹⁵⁴⁹

Topics of medical interest are:¹⁵⁵⁰ practices with the aim of increasing the size of

the male organ (7.20–30) and the size and firmness of the breasts in the female (7.37–43), removing a bad smell from the female genitals (7.45), removing the pubic hair in the female (7.46–50), and tightening the vagina (7.51–54). Chapter ten describes, amongst other things, how to drive away bhūtas who cause diseases (10.8–18), how to make insanity, kuṣṭha and visphoṭas appear and disappear again in one's enemies (10.19–31), and how to drive away insects, rats, snakes, etc. (10.32–44); it also contains recipes which are said to cure various women's diseases and female infertility, or to prevent abortion (10.46–93).

The *Uddiṣatantra*, which enjoys great popularity all over India, is quoted as a source in several texts,¹⁵⁵¹ e.g., the *Amṛtasāgara*, *Dattātreyatantra*, Kokkoka's *Ratirahasya*,¹⁵⁵² Nāgārjuna's *Kakṣapuṭa*, Narasiṃha's *Tārābhaktisudhārṇava*,¹⁵⁵³ the Mantrakhaṇḍa of Nityanātha's *Rasaratnākara*, and Sarvānandanātha's *Sarvollāsa*.¹⁵⁵⁴

A version of the *Uddiṣatantra* in the form of a dialogue between Śiva and Pārvatī contains a chapter, called grastabālacikitsā, which deals with the treatment of children possessed by grahas, and shows a close affinity with the *Kumāratantra*, attributed to Rāvaṇa.¹⁵⁵⁵

ULŪKAKALPA.¹⁵⁵⁶
 UMĀMAHEŚVARASAMVĀDA.¹⁵⁵⁷
 UNMĀDACIKITSĀPAṬALA.¹⁵⁵⁸
 UNMĀDALAKṢAṆACIKITSĀ.¹⁵⁵⁹
 UPADAMŚACIKITSĀ.¹⁵⁶⁰
 UPAYUKTALAGHUVĀIDYA.¹⁵⁶¹
 UPAYUKTAVĀIDYA.¹⁵⁶²
 UṢAḤPĀNĪYA.¹⁵⁶³
 UṢĀNIDĀNA.¹⁵⁶⁴
 UTPALEŚVARASĀRASAMGRAHA.¹⁵⁶⁵
 UTTARASTHĀNA.¹⁵⁶⁶
 UTTARAVĀRUNĪKALPA.¹⁵⁶⁷
 VĀHANASĀRA.¹⁵⁶⁸
 VAIDEHASAMGRAHA.¹⁵⁶⁹
 VĀIDYA.¹⁵⁷⁰
 VAIDYABHĀSKARODAYA.¹⁵⁷¹
 VAIDYABHĒṢAJATARKA.¹⁵⁷²
 VAIDYABHŪṢAṆA.¹⁵⁷³
 VAIDYABHŪṢAṆĀDI.¹⁵⁷⁴
 VAIDYABHŪṢAṆANIGHAṆṬA.¹⁵⁷⁵
 VAIDYACANDRODAYA.¹⁵⁷⁶
 VAIDYACIKITSĀ.¹⁵⁷⁷
 VAIDYACIKITSĀMṚTA.¹⁵⁷⁸
 VAIDYACINTĀMAṆI.¹⁵⁷⁹
 VAIDYADARPAṆA.¹⁵⁸⁰
 VAIDYADĪPIKĀ.¹⁵⁸¹
 VAIDYADRAVYANĀMASAMUCCAYA.¹⁵⁸²

- VAIDYADRAVYAPARIMĀNANĀMADHEYAVICĀRA. ¹⁵⁸³
 VAIDYADRAVYASĀRA. ¹⁵⁸⁴
 VAIDYADRAVYAYOGA. ¹⁵⁸⁵
 VAIDYAGRANTHA. ¹⁵⁸⁶
 VAIDYAGUṆAPĀṬHA. ¹⁵⁸⁷
 VAIDYAGUṆASĀRA. ¹⁵⁸⁸
 VAIDYAKA. ¹⁵⁸⁹
 VAIDYAKACIKITSĀSĀRAKAUMUDĪ. ¹⁵⁹⁰
 VAIDYAKAGRANTHA. ¹⁵⁹¹
 VAIDYAKAGRANTHAPATTRĀṆĪ. ¹⁵⁹²
 VAIDYAKAGUṆASĀRA. ¹⁵⁹³
 VAIDYAKAKOŚA. ¹⁵⁹⁴
 VAIDYAKĀLAJĪNĀNA. ¹⁵⁹⁵
 VAIDYAKALLOLA. ¹⁵⁹⁶
 VAIDYAKALPA. ¹⁵⁹⁷
 VAIDYAKALPABHŪṢAṆA. ¹⁵⁹⁸
 VAIDYAKALPADRUMA. ¹⁵⁹⁹
 VAIDYAKALPATARU. ¹⁶⁰⁰
 VAIDYAKAMĀDHAVĪ. ¹⁶⁰¹
 VAIDYAKAMANORAMĀ. ¹⁶⁰²
 VAIDYAKAMATASĀRASAMGRAHA. ¹⁶⁰³
 VAIDYAKANIGHAṆṬU. ¹⁶⁰⁴
 VAIDYAKANIGHAṆṬUVIŚEṢA. ¹⁶⁰⁵
 VAIDYAKAPARIBHĀṢĀ. ¹⁶⁰⁶
 VAIDYAKAPRASTĀVIKĀSAMGRAHA. ¹⁶⁰⁷
 VAIDYAKARASĀYANA. ¹⁶⁰⁸
 VAIDYAKARATNAMĀLIKĀ. ¹⁶⁰⁹
 VAIDYAKARATNĀVALĪ. ¹⁶¹⁰
 VAIDYAKASAMGRAHA. ¹⁶¹¹
 VAIDYAKASAMGRAHA. ¹⁶¹²
 VAIDYAKASAMHITĀ. ¹⁶¹³
 VAIDYAKASĀRA. ¹⁶¹⁴
 VAIDYAKASĀRACIKITSĀ. ¹⁶¹⁵
 VAIDYAKASĀRASAMGRAHA. ¹⁶¹⁶
 VAIDYAKASĀRĀVALĪ. ¹⁶¹⁷
 VAIDYAKASĀRODDHĀRA. ¹⁶¹⁸
 VAIDYAKAUSTUBHA. ¹⁶¹⁹
 VAIDYAKAVĀDA. ¹⁶²⁰
 VAIDYAKAVIDHI. ¹⁶²¹
 VAIDYAKĪYAPRAYOGA. ¹⁶²²
 VAIDYAKĪYASAMSKṚTADRĀVIDAPRATIPADĀRTHAKOŚA. ¹⁶²³
 VAIDYAKUTŪHALA. ¹⁶²⁴
 VAIDYALA KṢAṆA. ¹⁶²⁵
 VAIDYĀLAMKĀRA. ¹⁶²⁶

VAIDYAMAHĀSĀRARAHASYA. ¹⁶²⁷

VAIDYAMAHOTSAVA. ¹⁶²⁸

VAIDYAMĀLIKĀ. ¹⁶²⁹

VAIDYAMANORAMA or CIKITSĀKRAMA. ¹⁶³⁰ This work consists of a collection of recipes in Sanskrit with a commentary in Malayāḷam. The arrangement of the diseases and of the prescriptions against them does not fully agree with one of the established patterns, but has been influenced by the order found in the works ascribed to Vāgbhaṭa.

Part I has twelve chapters: jvara (1), rakṭapitta (2), asṛgdara (3), ¹⁶³¹ kāsa (4), hidhmā and śvāsa (5), rājayaḥṣman, svarasāda (= svarabheda) and arocaka (6), bhaktarodha (7), ¹⁶³² chardi, hṛdroga and tṛṣṇā (8), madātyaya (9), arśas, rakṭārśas and udāvarta (10), ¹⁶³³ atisāra, rakṭātisāra, pravāhikā and gr̥dhrasī (11), ¹⁶³⁴ grahaṇī and viṣūcikā (12).

Part II has eighteen chapters: mūtrakṛcchra (13), prameha, piṭakā, somaroga and mūtrātisāra (14), ¹⁶³⁵ vidradhi and vṛddhi (15), gunma, ¹⁶³⁶ raktagunma, śūla, ānāhādi and jalakūrma (16), ¹⁶³⁷ mahodara (17), pāṇḍuroga, kāmīlā and kumbhakāmīlā (18), śopha (19), visarpa (20), masūrikā, visphoṭaka, kakṣyā and śtipitta (21), ¹⁶³⁸ kuṣṭha (22), śvitra and kṛmī (23), vātaroga (24), vātaśonita (25), uraḥkṣatādi, sthūlaroga, kṛśaroga, vandhyā, prasūtiroga and bālaroga (26), ¹⁶³⁹ unmādādi and apasmāra (27), netraroga (28), karṇaroga (29), and pratiśyāyādi (30).

Several subjects are not dealt with at all, in particular many disorders belonging to śalya. Chapters on viṣa, rasāyana and vājīkaraṇa are also absent.

The author and date of this work are unknown.

VAIDYAMANORAMĀ. ¹⁶⁴⁰

VAIDYAMANOTSAVA. ¹⁶⁴¹

VAIDYĀMṚTA. ¹⁶⁴²

VAIDYĀMṚTASĀRA. ¹⁶⁴³

VAIDYAMUKHADARPANA. ¹⁶⁴⁴

VAIDYAMUKTĀVALĪ. ¹⁶⁴⁵

VAIDYANĀMAMĀLĀ. ¹⁶⁴⁶

VAIDYANAYABODHIKĀ. ¹⁶⁴⁷

VAIDYANIBANDHA. ¹⁶⁴⁸

VAIDYANIDĀNA. ¹⁶⁴⁹

VAIDYANIGHAṆṬU. ¹⁶⁵⁰

VAIDYĀNUBHAVA. ¹⁶⁵¹

VAIDYAPADAPRATIPADĀRTHAKOŚA. ¹⁶⁵²

VAIDYAPADDHATĪ. ¹⁶⁵³

VAIDYAPRADĪPA. ¹⁶⁵⁴

VAIDYAPRAKĀRA. ¹⁶⁵⁵

VAIDYAPRAMEYANIRŪPANA. ¹⁶⁵⁶

VAIDYAPRASTĀVANĀ. ¹⁶⁵⁷

VAIDYAPRIYAKĀVYA. ¹⁶⁵⁸

VAIDYARAHASYA. ¹⁶⁵⁹

- VAIDYARAHASYAPADDHATĪ. ¹⁶⁶⁰
 VAIDYARĀJATANTRA. ¹⁶⁶¹
 VAIDYARASAMAÑJARĪ. ¹⁶⁶²
 VAIDYARASĀMṚTA. ¹⁶⁶³
 VAIDYARASARATNA. ¹⁶⁶⁴
 VAIDYARATNA. ¹⁶⁶⁵
 VAIDYARATNĀKĀRABHĀṢYA. ¹⁶⁶⁶
 VAIDYĀRṆAVA. See *Ārṣavidyānuśāsana*.
 VAIDYĀRṆAVAMUKURA. ¹⁶⁶⁷
 VAIDYASĀGARA. ¹⁶⁶⁸
 VAIDYASAMGRAHA. ¹⁶⁶⁹
 VAIDYASAMJĪVANA. ¹⁶⁷⁰
 VAIDYASĀMUDRA. ¹⁶⁷¹
 VAIDYASĀRA. ¹⁶⁷²
 VAIDYASĀRAMAÑJARĪ. ¹⁶⁷³
 VAIDYASĀRANIGHANṬU. ¹⁶⁷⁴
 VAIDYASĀRASAMGRAHA. ¹⁶⁷⁵
 VAIDYASĀRASAMUCCAYA. ¹⁶⁷⁶
 VAIDYASĀRASVATA. ¹⁶⁷⁷
 VAIDYASĀRĀVALĪ. ¹⁶⁷⁸
 VAIDYASĀRODDHĀRA. ¹⁶⁷⁹
 VAIDYASARVASVA. ¹⁶⁸⁰
 VAIDYASARVASVACIKITSĀRṆAVA. ¹⁶⁸¹
 VAIDYASARVASVASĀRASAMGRAHA. ¹⁶⁸²
 VAIDYASĀSTRA. ¹⁶⁸³
 VAIDYASĀSTRADĪPIKĀ. ¹⁶⁸⁴
 VAIDYASĀSTRADVIPAÑCĀŚIKĀ. ¹⁶⁸⁵
 VAIDYASĀSTRANIDĀNA. ¹⁶⁸⁶
 VAIDYASĀSTRAPRAVARTAKĀCĀRYANĀMASAMUCCAYA. ¹⁶⁸⁷
 VAIDYASĀSTRASĀRASAMGRAHA. ¹⁶⁸⁸
 VAIDYASAUKHYA. ¹⁶⁸⁹
 VAIDYASIDDHĀNTACANDRIKĀ. ¹⁶⁹⁰
 VAIDYASIDDHĀNTAKAUMUDĪ. ¹⁶⁹¹
 VAIDYASUBHĀṢITA. See *Vaidyakaprastāvīkāsaṃgraha*.
 VAIDYASŪTRAṬĪKĀ. ¹⁶⁹²
 VAIDYATANTRA. ¹⁶⁹³
 VAIDYAVALLABHA. ¹⁶⁹⁴
 VAIDYAVIDHĀNA. ¹⁶⁹⁵
 VAIDYAVIDHI. ¹⁶⁹⁶
 VAIDYAVIDVAJJANOLLĀSA. ¹⁶⁹⁷
 VAIDYAVIDYĀPRAKĀṢĀ. ¹⁶⁹⁸
 VAIDYAVIDYĀMṚTA. ¹⁶⁹⁹
 VAIDYAVIDYĀVINODA. ¹⁷⁰⁰
 VAIDYAVIJÑĀNASAMGRAHA or *Vidvadvidyarañjanī*. ¹⁷⁰¹

- VAIDYAVILĀSA. ¹⁷⁰²
 VAIDYAVINODA. ¹⁷⁰³
 VAIDYAVIṢAYA. ¹⁷⁰⁴
 VAIDYAVIṢAYĀNUKRAMANIKĀ. ¹⁷⁰⁵
 VAIDYAVYĀDHINIGRAHA. ¹⁷⁰⁶
 VAIDYAYOGA. ¹⁷⁰⁷
 VAIDYAYOGARATHA. ¹⁷⁰⁸
 VAIDYAYOGASAMGRAHA. ¹⁷⁰⁹
 VĀJĪKARANA. ¹⁷¹⁰
 VĀJĪKARANADĪPIKĀ. ¹⁷¹¹
 VĀJĪKARANAKALPA. ¹⁷¹²
 VĀJĪKARANARATNAMĀLĀ. ¹⁷¹³
 VĀKYAPRADĪPIKĀ. ¹⁷¹⁴
 VAMANAVIRECANAVASTUKATHANA. ¹⁷¹⁵
 VAMANAVIREKĀDICIKITSĀ. ¹⁷¹⁶
 VANASPATYĀDIVIVIDHAKALPA. ¹⁷¹⁷
 VANDĀKALPA. ¹⁷¹⁸
 VANDHYĀCIKITSĀ. ¹⁷¹⁹
 VANDHYĀKALPA. ¹⁷²⁰
 VANDHYĀPRAYOGA. ¹⁷²¹
 VAṆGAKALPA. ¹⁷²²
 VARAUSADHIPRAKARAṆA. ¹⁷²³
 VARGASŪTRAVYĀKHYĀ. ¹⁷²⁴
 VARUṆAKALPA. ¹⁷²⁵
 VASANTAKUMĀRĀDIYOGA. ¹⁷²⁶
 VASTUGUṆĀGUṆA. ¹⁷²⁷
 VASTUGUṆAKALPAVALLĪ. ¹⁷²⁸
 VASTUGUṆANIRṆAYA. ¹⁷²⁹
 VASTUGUṆAPĀṬHA. ¹⁷³⁰
 VAŚYĀDIPRAYOGA. ¹⁷³¹
 VĀTABHEDAPRABHEDACIKITSĀ. ¹⁷³²
 VĀTACIKITSĀ. ¹⁷³³
 VĀTACINTĀMAṆI. ¹⁷³⁴
 VĀTAJVARACIKITSĀ. ¹⁷³⁵
 VAṬAKACŪRṆARASĀYANANIRMĀṆAVIDHI. ¹⁷³⁶
 VĀTANIDĀNA. ¹⁷³⁷
 VĀTAPRAMEHACIKITSĀ. ¹⁷³⁸
 VĀTARAKTACIKITSĀ. ¹⁷³⁹
 VĀTAROGACIKITSĀ. ¹⁷⁴⁰
 VĀTAROGANIDĀNA. ¹⁷⁴¹
 VĀTAROGAŚĀNTI. ¹⁷⁴²
 VĀTAŚĀTAKA. ¹⁷⁴³
 VĀTAŚŪLACIKITSĀ. ¹⁷⁴⁴
 VATSAKĀDIKAṢĀYALAKṢAṆA. ¹⁷⁴⁵

- VĀYUJAMALABANDHACIKITSĀ. ¹⁷⁴⁶
 VĀYUPAÑCAKALAKṢANA. ¹⁷⁴⁷
 VĀYUŚOBHĀCIKITSĀ. ¹⁷⁴⁸
 VEGARĀJAVIVEKA. ¹⁷⁴⁹
 VIBODHASĀRA. ¹⁷⁵⁰
 VICITRAROGAKĀRAṆATACCIKITSĀKRAMA. ¹⁷⁵¹
 VIDVADVAIDYARAÑJANĪ. See *Vaidyavijñānaśaṃgraha*.
 VIDVADVALLABHA. ¹⁷⁵²
 VIDYĀPRAKĀŚACIKITSĀ. ¹⁷⁵³
 VIJAYĀKALPA. ¹⁷⁵⁴
 VIṢṬATIGULMANIDĀNA. ¹⁷⁵⁵
 VIṢṬATIPAITYĀDĀNANIDĀNA. ¹⁷⁵⁶
 VIṢṬATISĒṢMĀDĀNANIDĀNA. ¹⁷⁵⁷
 VIṢṬATISĒṢMĀDĀNANIDĀNACIKITSĀ. ¹⁷⁵⁸
 VĪRABHADRAYANTRA. ¹⁷⁵⁹
 VĪRACINTĀMAṆI. ¹⁷⁶⁰
 VIRECANAKAŚĀYAVIDHI. ¹⁷⁶¹
 VIRECANAUṢADHAVIDHĀNA. ¹⁷⁶²
 VIRECANAVIDHI. ¹⁷⁶³
 VIṢACIKITSĀ. ¹⁷⁶⁴
 VIṢAGARBHATAILAVIDHI. ¹⁷⁶⁵
 VIṢAHARACIKITSĀ. ¹⁷⁶⁶
 VIṢAHARAGUṬIKĀNIRMĀṆAVIDHI. ¹⁷⁶⁷
 VIṢAHARAMANTRAUṢADHA. ¹⁷⁶⁸
 VIṢAHARANA. ¹⁷⁶⁹
 VIṢAHARATANTRA. ¹⁷⁷⁰
 VIṢAHARAUṢADHA. ¹⁷⁷¹
 VIṢAKALPA. ¹⁷⁷²
 VIṢAMAÑJARĪ. ¹⁷⁷³
 VIṢAMUṢṬIKALPA. ¹⁷⁷⁴
 VIṢAMUṢṬITAILAYOGA. ¹⁷⁷⁵
 VIṢĀPAHĀRASTOTRA. ¹⁷⁷⁶
 VIṢAPRATIVIṢACIKITSĀ. ¹⁷⁷⁷
 VIṢAROGAPATHYĀPATHYAVICĀRA. ¹⁷⁷⁸
 VIṢAVIDYA. ¹⁷⁷⁹
 VIṢODDHĀRA. ¹⁷⁸⁰
 VIŚVANĀTHACIKITSĀ. ¹⁷⁸¹
 VIŚVANĀTHAPRAKĀŚA. ¹⁷⁸²
 VIŚVASRṢṬIVIDHĀNA. ¹⁷⁸³
 VIVEKACANDRA. ¹⁷⁸⁴
 VIVIDHACIKITSĀ. ¹⁷⁸⁵
 VIVIDHAJVARAUṢADHANIRMĀṆĀNUPĀNAKRAMA. ¹⁷⁸⁶
 VIVIDHAKALPA. ¹⁷⁸⁷
 VIVIDHAŚVĀSAKĀSAUṢADHACIKITSĀ. ¹⁷⁸⁸

VIVIDHAUṢADHANIRMĀṆĀNUPĀNACIKITSĀVICĀRA.¹⁷⁸⁹
 VIVIDHAVYĀDHICIKITSĀ.¹⁷⁹⁰
 VIVIDHAVYĀDHICIKITSĀUṢADHĀNUPĀNAKRAMA.¹⁷⁹¹
 VRAṆACIKITSĀGRANTHA.¹⁷⁹²
 VRAṆAJĀRACŪRĀPURĀṆAJVARAKAṢĀYANIRMĀṆAVIDHI.¹⁷⁹³
 VRAṆANIDĀNA.¹⁷⁹⁴

VṚDDHASŪRYĀRṬASAMVĀDA, a dialogue between Sūrya and his charioteer Aruṇa on karṇavipāka. This text, dating from the eighteenth century, is of special interest because of its use of case-histories.¹⁷⁹⁵

VṚKṢAKALPA.¹⁷⁹⁶
 VṚTTARATNĀVALĪ.¹⁷⁹⁷
 VṚTTASAMKHYĀNIDĀNA.¹⁷⁹⁸
 VYĀDHIDHVAṢSINĪ.¹⁷⁹⁹
 VYĀDHINIDĀNA.¹⁸⁰⁰
 VYĀDHINIRṆAYA.¹⁸⁰¹
 VYĀDHISIDDHĀṆJANA.¹⁸⁰²
 VYĀDHITADAUṢADHANIRMĀṆAVICĀRA.¹⁸⁰³
 VYĀDHYAUṢADHĀNUPĀNAPATHYANIRNAYA.¹⁸⁰⁴
 VYĀDHYAUṢADHĀNUPĀNAVIDHĀNA.¹⁸⁰⁵
 VYĀGHRĪKALPA.¹⁸⁰⁶
 YAKṢMAROGANIDĀNA.¹⁸⁰⁷
 YĀMALĀṢṬAKATANTRA.¹⁸⁰⁸
 YANTRAMANTRACIKITSĀVIDHĀNA.¹⁸⁰⁹
 YAVANACIKITSĀ.¹⁸¹⁰
 YOGACANDRIKĀ.¹⁸¹¹
 YOGACANDRIKĀVILĀSA.¹⁸¹²
 YOGACINTĀMAṆI.¹⁸¹³
 YOGACŪḌĀMAṆI.¹⁸¹⁴
 YOGĀDHĪKĀRA.¹⁸¹⁵
 YOGADĪPIKĀ.¹⁸¹⁶
 YOGAKALPADRUMA.¹⁸¹⁷
 YOGAMĀDHAVA.¹⁸¹⁸
 YOGAMAHODADHI.¹⁸¹⁹
 YOGAMĀLĀ.¹⁸²⁰
 YOGAMĀLIKĀ. See *Yogasāra*.
 YOGAMAṆJARĪ.¹⁸²¹
 YOGĀMṚTA.¹⁸²²
 YOGANIDHĀNA.¹⁸²³
 YOGAPRADĪPA.¹⁸²⁴
 YOGAPRADĪPIKĀ.¹⁸²⁵
 YOGARĀJĀŚĀTAKA.¹⁸²⁶
 YOGARATNA.¹⁸²⁷

- YOGARATNĀKARA. ¹⁸²⁸
 YOGARATNAMĀLĀ. ¹⁸²⁹
 YOGARATNASAMGRAHA. ¹⁸³⁰
 YOGARATNASAMUCCAYA. ¹⁸³¹
 YOGARATNĀVALĪ. ¹⁸³²
 YOGĀRṆAVA. ¹⁸³³
 YOGASAMGRAHA. ¹⁸³⁴
 YOGAŚAṆKHAṬAKA. ¹⁸³⁵
 YOGASĀRA. ¹⁸³⁶
 YOGASĀRA, also called *Yogamālikā*. ¹⁸³⁷
 YOGASĀRĀVALĪ. ¹⁸³⁸
 YOGAŚATABANDHA. ¹⁸³⁹
 YOGAŚATĀBHIDHĀNA. ¹⁸⁴⁰
 YOGAŚATAPRABANDHA. ¹⁸⁴¹
 YOGATARAṆGIṆĪ. ¹⁸⁴²
 YOGĀVALĪ. ¹⁸⁴³
 YOGĒŚVARA. ¹⁸⁴⁴
 YONIVYĀPACCIKITSĀ. ¹⁸⁴⁵

Chapter 5

Authors and works from Sri Lanka

ARIṢṬAMĀLĀ.¹

ARIṢṬAŚATAKA.²

ĀRYADĀSA KUMĀRASIMḤA³ is the author of the *Kvāthamaṇimālā*, *Kvāthavidhāna-paddhati*, *Laṅkābhaiṣajyamaṇimālā*, and *Mahaṣaḍhanighaṇṭu*.

The *Kvāthamaṇimālā*,⁴ a treatise in 500 verses, contains a collection of kvāthas against various diseases; the recipes are preceded by a prākkathana (1–7), giving information on the author; it ends with a parisamāpti (501–503) on the purpose of the book and the date of its completion.

The sources used by the author, mentioned in his Preface (kiñcid vaktavyam), are: *Āyurvedavijñāna*, *Bhaiṣajyakalpa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bhesajjamañjū-sā*, *Bṛhannighaṇṭuratnākara*, *Cakradatta*, *Caraka*, *Dhanvantarivaidyaka*, *Gadanigraha*, *Hārīta*, *Sārārthasaṃgraha*, *Sārasaṃkṣepa*, *Śāringadhara*, *Śataśloka*, *Suśruta*, *Vāgbhāta*, *Viṅgasena*, *Yogadhāraṇa*, *Yogarātñākara*, and *Yogaśataka*.

The materia medica of this work does not contain many unusual items. Some noteworthy names of plants are: *caturasrā* (461), *gomeṇḍa* (458), *masaka* (299), *paśācekṣu* (23; 279), *pañcanālīlatā* (496), *puṣyalatā* (497), *puṭakoṣa* (68), *śrīkaṇṭha* (299), *sugandhamudgā* (25), *sugandhivacā* (113),⁵ and *tāmraparṇa* (68).⁶

The *Kvāthamaṇimālā* was completed in A.D. 1939/40.⁷

The *Laṅkābhaiṣajyamaṇimālā*⁸ is a collection of recipes, arranged in twelve chapters (*aṃśa*): (1) an uddeśa of an introductory character (10 verses); (2) *kalka* (55 verses); (3) *kvātha* (60 verses); (4) *phāṇṭa* (12 verses); (5) *cūrṇa* (98 verses); (6) *gutikā* (272 verses); (7) *rasāyana* (146 verses); (8) *saṃdhāna* (39 verses); (9) *taila* (125 verses); (10) *pralepa* (122 verses); (11) *miśrabhaiṣajya* (35 verses); (12) *saṃmiśra* (245 verses); an *upasaṃhṛti* (32 verses) is appended to the last chapter. Both āyurvedic and iatrochemical formulae form part of this therapeutic compendium.

The author mentions a large number of unusual names of plants, as well as various plants and substances of vegetable origin that were introduced at a later date and are absent from the classical texts.

Noteworthy names are: *agramālī* (12.171), *ākallaka* (9.72), *ākāraṅkarabha* (2.6 and 35; 3.44; 5.84 and 90; 6.147; 10.60; 12.3), *akarkara* (5.54; 12.108), *āmragandha* (9.34),⁹ *āmragandhika* (10.51), *anīśā* (5.71; 12.34), *anitrā* (5.50), *anojā* (10.28,

51, 108, 112), āraṇyairāṇḍa (9.2), arudrā (9.117), bāhubhūti (5.60), bhaṅgā (6.52), bhīrālu (12.96),¹⁰ bhūmiphala (7.23), caināluka (5.29, 39, 55; 12.9), cainamūla (5.12), citrabhaṅṭā(latā) (6.107 and 158; 12.2, 67, 123), citrabhaṅṭākī (3.43; 6.31), citrabhaṅṭikā (6.25 and 189), copacīnī (3.41 and 48; 7.6, 19, 42, 56), curīndra (12.30), dakaśarbaraka (9.34), deśimūla (6.209), devajīraka (2.21 and 42), dharmapattana (6.150 and 243; 9.65),¹¹ dhūmadalā (12.231),¹² dīrghakālā (9.1),¹³ drukilima (9.51),¹⁴ drumibīja (6.27 and 192), gandhaphalī (5.12; 9.60),¹⁵ gañjā (6.207; 7.19; 8.25), gomeṇḍa (6.231), gopilu (6.222 and 224), haladī (10.18),¹⁶ haṭṭavilāsini (9.76),¹⁷ hemabhaṅṭa (3.23), hemabhaṅṭā (8.11), jaillikabīja (9.91), kaja (6.125; 9.47), kākūṇa (12.95), kapitthapattrī (5.82),¹⁸ karpatikā (9.34), kartarikā (6.36), kaukīna (10.118), khākhadāphala (7.5), khalakṣīrī (5.14), kharājapūṣpa (12.37), khāsatilā (7.20), khurāsānī (12.20), kolāmapattraka (12.231), kṛṣṇabola (10.46 and 52), kṛṣṇaśarbaraka (6.79), krūradru (3.10; 4.1; 6.79 and 197; 8.30 and 36; 9.57; 10.23; 11.19; 12.13, 78, 138), kṣīramāṇṣā (7.125; 12.105, 116, 124, 126), kucumba (10.86; 12.163), kucumbaka (9.98), kucumbakī (7.20), kūrcālu (3.2, 5, 7; 6.73 and 78; 11.3 and 29), kuṣṭhagandhinī (7.28),¹⁹ kutumbā (12.230), lābhāṅṭī (12.106), latāphenila (9.28), lavaṅgā (5.79 and 91; 7.28), madanakāma (7.44), madhuvallārī (12.108),²⁰ mahābharīvacā (12.21), mahījambuka (4.6),²¹ mālīkā (6.78),²² māṇṣavera (6.1), mārjāramohinī (6.5; 9.120; 10.69), māyāphala (6.24 and 147; 12.20),²³ mṛgakṣīrī (9.92), nāgamarica (10.93), navasandhidruma (12.132), nutāndhā (10.92), pañcapattrī (3.23),²⁴ pītarohinī (7.22 and 53),²⁵ puṣpadehikā (6.79), raktamālyā (10.81), śaśakapriyā (6.58 and 67), senāpattrī (12.126), śivajīraka (6.89), sudhāmūlī (7.20),²⁶ śukabhūruha (9.34),²⁷ sūrīpattrā (9.76), svarṇapattrī (6.19; 12.30),²⁸ svarṇavarā (5.59; 6.132; 7.29; 8.1), śvetanīpa (10.97), takkola (5.87 and 88; 7.29; 12.139),²⁹ tallā (9.84), tryasravallī (12.125), vallārīphenila (3.28), vallīphenila (3.25), vanadhūlaka (3.38), vanaśarbara (6.78), viśadhūlī (12.96), vratatīphenila (9.73), vṛtyeraṇḍa (9.76; 12.213), yakṣaṇāgaraṅga (6.149, 208, 213), yakṣārī (6.186), and yūthikaparnīkā (10.54).³⁰

Noteworthy names of inorganic substances are: ākḥupāṣāṇa (12.50), aśvapāṣāṇa (12.42), khallamajjā (2.12; 5.59; 6.169), marīnaropala (6.264), śilāmajjā (6.148 and 211), śilāsānū (6.148 and 211), śivānta (12.82), śivāntapāṣāṇa (12.42), and sphuṭī (10.120).

Opium is repeatedly prescribed; one recipe contains a substitute for opium (2.50–55: ahiphenapratiniḍhi).

One formula was given by some deity to king Buddhādāsa (5.73–77); another formula derives from a sage called Yakṣaujas (6.1–15).

Remarkable names of diseases are: caurikā (10.55: scabies), khoratā (5.68), khoravāta (3.35), Idomaroga (2.18), paribhavavyādhi (6.255), phiraṅga (5.34 and 58), phusphusaroga (2.18), plīthasphīti (3.1), pūyameha (12.26), and saṃkrāmakagada (6.12: infectious disease).

The *Mahaśaḍhanighaṇṭu*³¹ is a short nighaṇṭu written in Sanskrit.

The work enumerates the names and properties of a number of medicinal substances. It consists of 429 verses, arranged in seven chapters. The first seventeen verses are of an introductory nature. The seven chapters are: (1) mahaśaḍhādivarga

(141 verses); (2) candanādivarga (49 verses); (3) bilvādivarga (67 verses); (4) phala-varga (42 verses); (5) svarṇādivarga (51 verses); (6) saṃmiśravarga (54 verses); (7) saṃkhyāvarga (25 verses on groups of drugs).

Noteworthy drugs described are: ahiphena (1.128–132), anannāsa (pineapple; 4.37–39), bhaṅgā (1.123–127), cāhā (tea; 6.12–14), eraṇḍacirbhiṭa (4.40–42),³² iṣadgola (6.10–11),³³ kāphī (coffee; 6.15), kastūrī (2.33–38),³⁴ kharjūrī (4.32–36),³⁵ raktama-rica (6.42–43),³⁶ śatamalla (5.46–51), trikārṣika (7.17),³⁷ three types of trikaṭuka (7.1–4),³⁸ trimada (7.16),³⁹ and three types of triphalā (7.7–12).⁴⁰

The *Mahaśudhanighaṇṭu* has been influenced by the *Bhāvaprakāśanighaṇṭu*.⁴¹ The work was written at the request of K.D. Senāratna for the benefit of Āyurvedic practitioners in Sri Lanka.⁴²

The upasaṃhṛti at the end of the *Laṅkābhaiṣajyamaṇimālā* and the prākkathana of the *Kvāthamaṇimālā* provide information on the author, who belongs to the twentieth century. He was born in Devanagara and studied at the university called Mahāmantrīndra in Rohaṇa, on the banks of the Nīlavalāhaka river.⁴³ After completing his studies he settled in Kolamba (Colombo), where he became the chancellor (adhipati) of the Śrī Siddhārtha Āyurvedic College.

The author is a Buddhist, as is obvious from the maṅgalas of the *Kvāthamaṇimālā*, *Laṅkābhaiṣajyamaṇimālā* and *Mahaśudhanighaṇṭu*.

Āryadāsa Kumārasiṃha wrote a large number of books in Siṃhala and Sanskrit. He translated the *Vṛttaratnākara* and *Śāringadharaśaṃhitā* into Siṃhala, composed kāvyas in Sanskrit and Siṃhala, rendered Siṃhala kāvyas into Sanskrit, etc.⁴⁴

AṢṬAPARĪKṢĀ.⁴⁵

ATTHADASSI is mentioned as the author of a *Mañjūsē*.⁴⁶ J. Liyanaratne has convincingly demonstrated that the references in a number of publications to this *Mañjūsā* by Atthadassi derive from an incorrect statement by G.P. Malalasekera,⁴⁷ who based himself on a publication of D.M. De Z. Wickremasinghe,⁴⁸ who cites in his turn a report by W.R. Kynsey.⁴⁹ The attribution of the *Bhesajjamañjūsā* to Atthadassi has therefore no factual basis.

AUṢADHAMUKTĀHĀRA.⁵⁰

BĀLAGRAHAŚĀNTI.⁵¹

BHAIṢAJYAMĀLĀ.⁵²

BHESAJJAKHANDAKA.⁵³

BHESAJJAMAÑJŪSĀ.⁵⁴ This treatise in verse, the only medical work written in Pali, is arranged in sixty chapters (paddhati). Chapters one to eighteen are concerned with general concepts (upaññāsavidhi), drugs (dabbādi), regimen (sadācāra), disorders caused by the suppression of the natural urges (agāmiroṇisedha), articles of food (annavyañjana), fluids (davadaḍḍa), poisoned foods (savisāhāra), antidotes (paṭivisa), disturbances of digestion (āmaḍḍa), classification of drugs (gaṇa), major treatments (mahākamma), minor treatments (cullakamma), unfavourable omens and other signs

(five chapters: *dūtārīṭṭha*, *gamanārīṭṭha*, *supinārīṭṭha*, *uppātārīṭṭha*, *rogārīṭṭha*), and general causes of diseases (*rogasāmañña*). Chapters nineteen to fifty-eight deal with diseases and their treatment; the order of the diseases differs from the arrangements found in other āyurvedic treatises. Chapter fifty-nine is about particular cures. Chapter sixty describes tonics (*rasāyana*).⁵⁵

Drugs of vegetable origin prevail over *rasayogas* in the chapters on treatment.⁵⁶

It is often assumed that the work was compiled for the use of Buddhist monks,⁵⁷ which would explain that diseases of women and children, charms, and incantations are excluded.⁵⁸ J. Liyanaratne⁵⁹ disagrees with this view, based, in his opinion, on a wrong interpretation of the introductory stanzas. He claims that the treatise was meant for Buddhist monks and medical practitioners in general; its aim was to help people to maintain their health and enable them to tread the path indicated by the Buddha.⁶⁰

The commentary on the work says that it is a Pali version of the medical science derived from the tradition of Mahābrahmā, Dakṣa, Prajāpati, etc., and expounded in the *Yogārṇava*, *Cintāmaṇisannaya*, *Yogarātnākara*, etc. The major part of the verses on *nidāna* are actually drawn from the *Aṣṭāṅgaḥṛdaya*,⁶¹ which is, in general, the most important source, besides the *Carakasamhitā*, *Suśrutasaṃhitā*, *Siddhasāra*, *Mādhavanidāna*, *Cakradatta*, and *Varigaseṇa*.⁶² Among less well known sources are the *Assinasamhitā*,⁶³ *Bindusāra*, *Bhāradvājya*, *Kumārasamhitā*, *Mahāyāna*, *Nārāyaṇīya*, and *Tikicchāmata*.⁶⁴

The influence of Indian medical works on the author is understandable in the light of the efforts of king Parākramabāhu II, who had many Indian books and scholars brought to his country, having its cultural uplift in mind.⁶⁵

The *Bhesajjamañjūsā* became well known in many Buddhist countries, including Burma, Thailand and Cambodia, and is said to have been translated into several languages.⁶⁶ It is mentioned in a Burmese inscription in Pagan, dated A.D. 1442.⁶⁷

The *Bhesajjamañjūsā* was one of the sources of Āryadāsa Kumārasīṅha's *Kvāthamanimālā*.

The *Bhesajjamañjūsā* was written by the Chief Elder (Mahāsthavira), head of the Fraternity of the Five Colleges (*Paspiruvanmūlasāmī* or *Pañcapariveṇasamūhanātha*), a Buddhist monk of brāhmaṇa origin.⁶⁸

The authorship of the *Bhesajjamañjūsā* is by some ascribed to Atthadassi Thera;⁶⁹ J. Liyanaratne has proved that this claim is unfounded.⁷⁰ The colophon of one MS mentions Anomadassi Saṅgharāja as the name of the author. This Anomadassi has been regarded as the one who wrote the *Daivajñākāmadhenu*, but this identification is rejected by J. Liyanaratne. Another Sinhalese scholar claimed, without any evidence, that the *Bhesajjamañjūsā* was composed by the Pañcamūlapariveṇādhīpati Maṅgala Saṅgharāja Māhimi.⁷¹

The *Bhesajjamañjūsā* was completed in A.D. 1261, during the reign of king Śrī Paṇḍita Parākramabāhu (Parakkamabāhu) II of Daṁbadeṇiya (A.D. 1236–1270).⁷² The year of completion, clearly mentioned in its colophon, is confirmed by the colophon of the *sannaya*.⁷³

A Sinhalese interverbal paraphrase (*sannaya*)⁷⁴ on the *Bhesajjamañjūsā* was written

by Saraṇaṃkara.⁷⁵ The colophon states that the commentaries and interverbal paraphrases on the work had become extinct in the course of time, which induced king Vīraparākrama Narendrasiripa (A.D. 1707–1739), who was in the possession of the book of gāthās, to invite the Buddhist prelate Vāliṇṭa Saraṇaṃkara (A.D. 1698/99–1778),⁷⁶ resident of the Uposathārāma, to render that work into Sinhalese. The colophon adds that this Saraṇaṃkara, with the assistance of his teacher Palkuñburē Atthadassi Thera and his own pupils, wrote a sannaya on chapters one to eighteen and translated the remaining chapters into Sinhalese.⁷⁷ This work was completed in A.D. 1734. The king was so pleased that he presented Saraṇaṃkara with an elephant.⁷⁸

Diyaḥunnata Dhammajoti, a pupil of Saraṇaṃkara, rendered the *Bhesajjamañjūsā* into Sinhalese; this work is known as the *Yogaṭṭakaya*,⁷⁹ quoted in the *Bhesajjamañjūsāsannaya*.

The *Bhesajjamañjūsāsannaya* quotes a large number of earlier authorities and works. Their names or titles are (in Sanskrit):⁸⁰ Agniveśa, Ālambāyaṇīya, Amita-prabhīya or Amṛtaprabhīya, Amṛtadhārā, Amṛtamālā, Amṛtāñjali, Asitasamhitā,⁸¹ Aṣṭāṅgasamgraha, Aśvinīsamhitā, Aurabhra, Bhadrāsaunakīya, Bhāluki, Bhañjaya,⁸² Bhāpekha,⁸³ Bhāradvājīya, Bhela, Bhiṣanīmuṣṭi, Bhojarājīya, Bindusāra, Buddhavaideha, Cakṣuṣyeṇa, Caṇḍāgra,⁸⁴ Candratā, Caraka, Cikitsākalikā, Cikitsāmṛta, Dravyāvalī, Gautamīya, Hariścandra, Hārīta, Hiraṇyākṣīya, Jātukarṇīya, Kāmaratanmālā, Kaṅkāyaṇīya, Kāśyapīya, Kātyāyaṇīya, Kharanāda, Kṛṣṇapurāṇa,⁸⁵ Kṣārapāṇi, Kumārasaṃhitā, Mādhavanidāna, Mahākāśyapīya, Mahābhāta,⁸⁶ Mahāyāna, Māñibhadra,⁸⁷ Mūlāgama, Nāgārjuna, Nārāyaṇīya, Pāṭhaśuddhi, Prayogakoṣa, Prayogaratnākara, Prayogaratnāvalī,⁸⁸ Prayogārṇava, Prayogasaṃgraha, Prayogasamuccaya, Śākyamata, Sārasaṃgraha, Siddhayoga, Siddhayogasamuccaya, Suśruta, Tantrasārasaṃgraha,⁸⁹ Vaidarbhīya, Vaidehīya, Vararuci, Vṛddhagarga, Vṛddhakāśyapīya, Yāvanakīya,⁹⁰ Yogakoṣa,⁹¹ Yogamālā, Yogaṭṭakā,⁹² Yogaratnasamuccaya, Yogārṇava,⁹³ Yogasamuccaya, Yogaśataka, and Yogāśīti.⁹⁴

BUDDHAPUTRA, the chief monk of the Mayūrapāda-periveṇa, wrote two medical works in Sinhalese,⁹⁵ the *Prayogaratnāvalīya* and the *Yogārṇava*.⁹⁶

The same author⁹⁷ composed the *Pūjāvalīya*, a religious work, referred to in the *Yogārṇavaya* and therefore earlier.⁹⁸

The *Prayogaratnāvalīya*⁹⁹ and *Yogārṇava*,¹⁰⁰ which deal largely with therapy,¹⁰¹ resemble the *Sārasaṃgraha* and have a great deal in common with Ravigupta's *Siddhasāra*.¹⁰² Both works are quoted in the *Bhesajjamañjūsāsannaya*.

Buddhaputra lived in the thirteenth century,¹⁰³ in about the same period as the author of the *Bhesajjamañjūsā*. He mentions in the *Yogārṇavaya* that he received his daily necessities from Śrī Saṅghabodhi Śrī Bhuvanekabāhu, i.e., king Bhuvanekabāhu I (A.D. 1273–1284).¹⁰⁴

DRAVYAGUṆADĪPAṆĪ.¹⁰⁵

RĀJAGURU KAVICANDRA was the author of the *Abhinavamādhavanidāna*,¹⁰⁶ an abridged and revised version of the *Mādhavanidāna*.¹⁰⁷

The work is arranged in sixty-four chapters, while their number is sixty-nine in most editions of the *Mādhavanidāna*. The order of the diseases is the same as in Mādhava's treatise. The text of the *Abhinavamādhavanidāna* shows variants and some minor additions when compared with the *Mādhavanidāna*.¹⁰⁸

Differences with the latter are: the combination of vātarakta and ūrustambha, mūtrāghāta and aśmarī, yonivyāpad and yonikanda in one chapter; a single chapter deals with śārīravraṇa, sadyovraṇa and bhagna; sūtikārōga, stanarōga and stanyaduṣṭi are also described in one chapter. A chapter on sūkadoṣa is absent, although a term designating this group of diseases¹⁰⁹ occurs at the appropriate place in the rogānukramaṇa at the end of the work. Added are chapters on vegagraha¹¹⁰ and trayodaśasanni,¹¹¹ as well as a list of the diseases described (rogānukramaṇa).¹¹²

The *Abhinavamādhavanidāna* was written by Rājaguru Kavicandra of the Śrī Kātyāyana family at the behest of the great king Soḷendrasimha Rājādhirāja of the solar dynasty.¹¹³

Paṇḍit Rājaguru Kavicandra is mentioned as the founder of a line of teachers in the *Vaidyacinṭāmaṇibhaiṣajyaśaṅgrahaya*,¹¹⁴ translated from Tamiḻ into Siṃhala by an author called Soḷendrasimha or Śeḷendrasimha or Śeḷasimha.¹¹⁵ The editions of this work mention that Rājaguru Kavicandra belonged to a pupillary succession (guruparamparā) of vaidyas who were holding the office of applying unguents to the royal person. He is described as the twin-brother or contemporary (sahajāta) of Rāmacandra Vaidyaratna, who came to the city of Jayavardhana¹¹⁶ in Sri Lanka from the Coḷa country in India. The MSS of the same work, however, mention a Rāmacandra Miśra, adding that he came to Sri Lanka from Kṣīrabhuktideśa.

It has been suggested that Rājaguru Kavicandra may prove to be the same as Rājaguru Śrī Candra, the author of the *Sārasaṃkṣepa*, a work that may be regarded as the therapeutic complement to the *Abhinavamādhavanidāna*.¹¹⁷ The author of the *Sārasaṃkṣepa*, however, is called Rājaguru Śrīcandrabhūsurasūri, and the order of the diseases in his work differs from the arrangement in the *Mādhavanidāna*.

The information on the chronological position of Rājaguru Kavicandra in the *Vaidyacinṭāmaṇibhaiṣajyaśaṅgrahaya*, which points to the Jayavardhana period (fifteenth-sixteenth centuries), conflicts with the colophon of the *Abhinavamādhavanidāna*, which says that it was written during the reign of Soḷendrasimha Rājādhirāja. Soḷendrasimha may be an epithet and refer to one of the two Coḷa kings who were called Rājādhirāja, namely Rājādhirāja I (A.D. 1044–1054)¹¹⁸ and II (A.D. 1173–1182).¹¹⁹

KUMĀRAUṢADHARĀŚANA.¹²⁰

MĀDHAVANIDĀNASĀRA, a work in Sanskrit verse, inspired by the *Mādhavanidāna*, was written on the request of Mahādhirāja Soḷendrasimha by an author referring to himself as the Rājaguru Kavicandrabiṣagvara. It is assigned to the Koṭṭa (Jayavardhanapura) period (A.D. 1412–1550). The maṅgala of this treatise is identical with that of the *Sarasvatīnighaṇṭu* and praises Nārada.¹²¹

Moggallāna was the author of the *Abhidhānappadīpikā*.¹²² This lexicon in Pāli, inspired by the *Amarakoṣa*,¹²³ deals with plant names and related subjects in its *araṇṇavagga*, which forms section five of part two of the work.¹²⁴

The author, Thera Moggallāna of the Vilgammūla fraternity, was a resident of the Jetavana Mahāvihāra¹²⁵ in Pulastipura (Polonnaruwa), built by king Parākrāmabāhu I (A.D. 1153–1186).¹²⁶ He lived during the latter part of this king's reign and is probably different from his namesake and contemporary, the grammarian Moggallāna, who wrote the *Moggallānavyākaraṇa*.¹²⁷

PRAYOGASAMUCCAYA.¹²⁸ A work of this name is quoted in the *Bhesajjamañjūsāsanaya*.

PRAYOGASAMUCCAYASAMKṢEPA.¹²⁹

RĀJASUNDARA was the author of the *Vaidyottamṣa*, a twentieth-century work in Sanskrit.¹³⁰

RĀMACANDRA, a brāhmaṇa, originating from Āndhradeśa,¹³¹ was the author of the *Pratikarmasaṃgraha*.¹³²

RATANAPĀLA was the author of the *Yogasaṃgraha*, a metrical work in Sanskrit.¹³³ ROGĀRIṢṬĀYA, a treatise on nidāna.¹³⁴

ŚĀILASIṂHA or Śailendrasīṃha was the author of the *Vaidyacintāmaṇibhaiṣajyasamgrahaya*, a comprehensive medical work in Sinhalese prose, with a large number of Sanskrit verses, quoted from earlier treatises. Śāilasiṃha's main source was, as indicated in the introductory verses, a Tamil work, probably called *Vaidyacintāmaṇi*, and based, in its turn, on a Sanskrit original, which may be the treatise of this title by Valabhendra.

Śāilasiṃha's work deals with aetiology (nidāna), purification of medicinal substances (dravyaśuddhi), rasayogas, and decoctions (kaṣāya). Surgical treatments are described, but also charms and offerings.

Information about the author and his lineage is given at the beginning of the treatise. Śailendrasīṃha was a pupil of Candrasekhara, who was a pupil of Siṃhabhaṭṭa. The latter belonged to a line of teachers going back to the brāhmaṇa Paṇḍita Rāmacandra Vaidyaratna, who came to Jayavardhana from the Cōla country.

Śailendrasīṃha also wrote the *Vaṭṭōruvedapota*, a formulary of medical prescriptions, in which he states to have been the physician to king Vīraparākrama Narendrasīṃha (A.D. 1707–1739), who, in recognition of his services, bestowed on him the title of Rājavidyaśekhara.¹³⁵

DON HENDRIK SAMARATUṄGA was the author of the *Yogamuktāvalī*, a Sanskrit treatise, accompanied by a Sinhalese translation, in 322 śloka, arranged in fifteen chapters.

This work, written at the request of Luvis Prērā Raṇasiṃha, was completed in A.D. 1855.¹³⁶

SĀRĀRTHASAMGRAHA,¹³⁷ a comprehensive medical treatise, in the form of a saṃhitā, written in Sanskrit. It consists of 2,600 verses, mostly in the śloka metre, arranged in forty-eight chapters.

Chapters one to three are concerned with (1) oṃina relating to the messenger, etc. (dūtalakṣaṇādi), (2) groups of drugs (dravyagaṇa), and (3) diet (annapānavidhi). Chapters four to ten deal with (4) treatment of pregnant women, (5) children's diseases, and (6–10) diseases of the head, eyes, ears, nose and mouth. Chapters eleven to forty-one are about the remaining diseases, arranged in an order that is peculiar to this treatise. Chapter forty-two is about treatment in general, chapter forty-three about pañcakarman, and chapter forty-four about sudation (sveda). The last four chapters are concerned with surgery, toxicology, antidotes, rasāyana and vājīkaraṇa.

The origin of āyurveda is ascribed to Brahmā.

The *Sārārthasamgraha* is said to show many similarities with the works of Vāgbhaṭa and Suśruta. Medical works from South India may also have influenced the author.¹³⁸ The work, described as a compilation, in conformity with its title, also contains original information. Diagrams representing the human body, the bodies of the elephant and the horse, and the bodies of some birds, are given in the treatise, along with directions as to the vital points to be avoided in surgical operations. Incantations and charms are also found in it.¹³⁹

The *Sārārthasamgraha* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*.

The Sinhalese tradition attributes the *Sārārthasamgraha* to an early king, Buddhadāsa (about A.D. 398–426),¹⁴⁰ presented in the *Cūḷavaṃsa* as a highly skilled physician, who made a sārātthasamgaha of all the medical sciences.¹⁴¹

The Pali chronicles report marvellous cures effected by this king, who systematically erected hospitals in the villages and shelters for crippled and blind people. Buddhadāsa was also reputed for his ability to treat snake-bites.¹⁴² His army disposed of military surgeons and he appointed physicians for the war elephants and horses.¹⁴³

An unknown author wrote a Sinhalese sannaya on the *Sārārthasamgraha* in later times.

The *Sārārthasamgraha*, although attributed to Buddhadāsa, has probably been composed at a later date, since Vāgbhaṭa, whose works were used by the author, is posterior to Buddhadāsa.¹⁴⁴

SĀRASAMGRAHA.¹⁴⁵ A work of this title is quoted in the *Bhesajjamañjūsāsanaya*.

SARASVATĪNIGHAṆṬU,¹⁴⁶ a medical lexicon of 348 verses, arranged in six chapters.¹⁴⁷ The maṅgala of the *Sarasvatīnighaṇṭu* is identical with that of the *Mādhavanidānasāra*.

The author of the work is unknown,¹⁴⁸ but it is often fathered upon Śāśvata,¹⁴⁹ who wrote the *Anekārthasamuccaya*.¹⁵⁰

The *Sārasvata(nighaṇṭu)* is quoted in Meghadeva's commentary on the *Mādhavadravayagūṇa*.

ŚATAŚLOKA.¹⁵¹

The *Śataśloka* was one of the sources of Āryadāsa Kumārasīṃha's *Kvāthamaṇimālā*.

SIDDHAUṢADHANIGHAṆṬU.¹⁵²

SIDDHISĀRA, in Sanskrit verse and Sinhalese prose. This work appears to consist of excerpts from the *Sārārthasaṃgraha* and *Varayogasāra*.¹⁵³

B. L. S. SILVA KAWITILAKA was the author of the *Gadaviniścaya*.¹⁵⁴

SĪPPUKULAMĒ DĪPAṆKARA or Yātindra Dīpaṇkara was the author of the *Vanavāsanighaṇḍuva*,¹⁵⁵ a glossary of the names of medicinal plants in one hundred and four Sinhala verses. The work dates from the eighteenth or nineteenth century.¹⁵⁶

ŚRĪCANDRA wrote the *Sārasaṃkṣepa*, a work on therapy in Sanskrit, accompanied by a paraphrase in Sinhalese. The *Sārasaṃkṣepa* is a compilation, containing copious quotations from earlier works.¹⁵⁷

A list of diseases (rogānukrama) and other subjects dealt with is given at the beginning of the work: jvara, atisāra, grahaṇī, vahnimandātā (= agnimāndya), ajīṛṇa, viśūcī, raktapitta, mūrchana, kāsa, śvāsa, hikkā, kṣaya, madātyaya, aruci, seka, tṛṣṇā, chardī, hṛdgada, gudavyādhi (= arśas), udāvarta, mūtrakṛcchra, pramehaka, vidradhī, vṛddhi, gulma, śūla, udara, śvayathu, ślīpada, pāṇḍu, kāmālā, visarpaka, kuṣṭha, krimigada, vraṇa, bhagandara, granthyādi, kṣudragada, masūrī, śītapittaka, kuṇḍalā, agnidagdha, bhagna, upadaṃśaka, asṛgdara, asthisrāva, pavanāmaya (= vātavyādhi), vātarakta, garbhavātīgada (disorders occurring during pregnancy), śīṣugada (= bālaroga), bālagrahākrama, unmāda, apasmṛti, netraroga, karṇaroga, nāsāroga, mukharoga, galāmaya, śīroroga, viṣa, rasāyana, and vājīkaraṇa.¹⁵⁸

The maṅgala shows the author to be a Hindu.¹⁵⁹

A *Sārasaṃkṣepa* is cited in Anantakumāra's *Yogaratanasamuccaya*. The *Sārasaṃkṣepa* was one of the sources of Āryadāsa Kumārasīṃha's *Kvāthamaṇimālā*.

DON SIMON TILLEKERATNE, a Muḍaliyār of Matara, compiled his *Bhesajjunidāne* about A.D. 1760 or a little later. This large work about diseases and their treatment is arranged on the same lines as Śailasīṃha's *Vaidyacintāmaṇibhaiṣajyasamgrahaya*. It is written partly in Sanskrit verses, quoted from earlier treatises, with comments (sanaya) by the author. An interesting feature is the description of eight varieties of phirāṅga (syphilis).¹⁶⁰

VAIDYĀLAṆKĀRASAMGRAHA, anonymous, in Sanskrit.¹⁶¹

VARASĀRĀRTHASAMGRAHA.¹⁶²

VARAVĀKYA, a collection of recipes; this work is a Sanskrit translation of a Siddha medical text.¹⁶³

VARAYOGASĀRAYA.¹⁶⁴

VĀSUDEVANIGHAṆṬU.¹⁶⁵

VIYARUVISAÜTPATTIYA, i.e., 'the origin of the poison of madness', composed in Sinhalese prose and verse, copiously interspersed with Sanskrit stanzas. This treatise opens with the story of Suśruta's asking his teacher Dhanvantari about the origin of madness; it mentions a bhikkhu Sumana, who suffered from hydrophobia. Dhanvantari's explanation forms the main portion of the work. Subjects also dealt with are: the creation of the world; the rise of the Ikṣvāku dynasty, and the cow-slaughter, permitted by the kings of this dynasty, as the cause of diseases; the origin of madness in animals; the effects of the bite of rabid animals. The colophon states that the system of medical treatments expounded in this work was practised by a brāhmaṇa called Śivagupta, who had come from Bengal and lived in Sri Lanka in the year A.D. 1697/98.¹⁶⁶

VARAṆAROGACIKITSĀ.¹⁶⁷

YOGADHĀRAṆA.¹⁶⁸ This work was one of the sources of Āryadāsa Kumārasimha's *Kvāthamañimālā*.

YOGAMĀLĀ.¹⁶⁹ A text of this title is quoted in the *Bhesajjamañjūsāsannaya*.

YOGARATNĀKARAYA,¹⁷⁰ a comprehensive treatise in Sinhala verses of various metres, based on classical āyurvedic texts.¹⁷¹ The work consists of more than 4,500 verses,¹⁷² arranged in forty-eight or forty-nine chapters,¹⁷³ dealing with the origin of āyurveda, groups of drugs, the treatment of pregnant women and children, the diseases from head to feet, gynaecology, surgery, and the examination of the pulse. The contents resemble those of the *Prayogarātnāvaliya*, *Varayogasāraya* and *Yogārṇavaya*.¹⁷⁴

The *Yogarātnākara* mentions a work called *Mañjūsā*¹⁷⁵ and is referred to as *Yogarātnākara* in the *Bhesajjamañjūsāsannaya*.

It was written by a Buddhist monk who was born in Monaragammana, Mōdarogam or Mōragammana.¹⁷⁶

The date of composition is disputed, but it may be that the treatise was completed in the thirteenth century.¹⁷⁷

YOGAŚEKHARA.¹⁷⁸

Chapter 6

Authors and works on veterinary medicine

ABHINAVACANDRA: ¹ *Hayaśāstra*.²

AGNIPURĀṆA. Chapter 287³ deals with elephants, their diseases, and the treatment of these diseases, as taught by Pālakāpya to Lomapāda.

The diseases mentioned are: pākala, pāṇḍuroga, śiraṣśūla, ānāha, mūrchā, pādaroga, vepathu, atīsāra, utkarnaka, karagraha, galagraha, mūtrabhaṅga, tvagdoṣa, kṛmikoṣṭha, gulma, kaṭuroga, madakṣīṇa, and netraroga.⁴ Chapter 288 is devoted to aśvaśāstra, as exposed by Dhanvantari; chapters 289 and 290 are concerned with the same subject, as taught by Śālihotra to Suśruta.

Chapter 291 is about elephants again; Śālihotra is the teacher.⁵

AGNIVEŚA: *Hastīśāstra*.⁶ Agniveśa or Agniveśya is mentioned as an authority on gajaśāstra in a number of texts on the subject.

AMAREŚVARA: *Siddhayogacikitsā*.⁷

AŚVACIKITSĀŚĀSTRA.⁸

AŚVĀDICIKITSĀ.⁹

AŚVĀDIGUṆA.¹⁰

AŚVADOṢANIRŪPAṆA.¹¹

AŚVAHRDAYA.¹²

AŚVALAKṢAṆA.¹³

AŚVALAKṢAṆAKRIYĀDI.¹⁴

AŚVALAKṢAṆAŚĀSTRA.¹⁵

AŚVANETRAPARĪKṢĀ.¹⁶

AŚVAPARĪKṢĀ.¹⁷

AŚVAPARĪKṢĀLAKṢAṆA.¹⁸

AŚVAPARĪKṢAṆA.¹⁹

AŚVAPARĪKṢĀṬĪKĀ.²⁰

AŚVAPRAŚAṂSĀ.²¹

AŚVAŚĀLIHOTRA.²²

AŚVASĀRA.²³

AŚVAŚĀSTRA.²⁴

AŚVATANTRA.²⁵

AŚVĀYURVEDA.²⁶

BASAVA: *Śivattvaratnākara*.²⁷ One chapter (VII.11: 227 verses) is devoted to the science of elephants; two chapters (VII.12: 224 verses; VII.13: 255 verses) are concerned with the science of horses.

The chapter on elephants deals with the mythical origin of elephants²⁸ (4–8), the forests where wild elephants are to be found (9–16),²⁹ the characteristics of elephants according to the forest where they have been captured (17–27ab), six types of elephants according to size (27cd–30),³⁰ the types called bhadra, manda and mrga (31–39), nine types with regard to their aṃśaka (44cd–70),³¹ the types of character (sattva; 71–82), breeds (anvaya; 83–90), elephants fit for employment, especially by the king (91–112), the elephant during rut (gandahastin; 113–123ab), anatomy and related subjects (123cd–141), auspicious and inauspicious marks (142–202),³² the fluid that exudes from an elephant's temples when it is on must (mada; 203–204), the thrusts of an elephant with its tusks (dantāghāta; 205–212),³³ auspicious characteristics of a female elephant (213–218ab), and the praise of elephants (218cd–225); the chapter ends with a summary of its contents (226–227ab).

The first chapter on horses describes the origin of horses, donkeys and mules (1–21ab), the classification of horses according to their colour (varṇa; 21cd–33ab), the constitutions (prakṛti; 33cd–41), the eight types of characteristics of horses (42),³⁴ the characteristics with regard to their body and the sizes of its parts (43–70ab) and the colour of the hair (70cd), horses of more than one colour³⁵ (71–92), bodily defects (93–101ab), the sheens (chāyā; 101),³⁶ trot (102), smell (103–104) and ways of neighing (105), the character types of horses (sattva; 106–107),³⁷ the whirls of hair (āvarta) and their meaning (108–185),³⁸ the determination of the age of horses by means of their teeth (186–189), the characteristics of a long-lived horse (190), the determination of the span of life by means of lines on the nostrils (protharekhā; 191–208), and auspicious and inauspicious characteristics (209–224).

The second chapter on horses is concerned with horses coming from various regions (1–140), auspicious marks again (141–145), topics relating to the mounting of a horse and its training (146–169ab), the regional divisions (kṣetra, daśā) of the body of a horse (169cd–178ab), and the deities presiding over the different parts of the body of a horse (178cd–186ab). The remaining part of the chapter is about chariots (192–197), bullocks (198–226ab), cows (226cd–239),³⁹ and the treatment of some diseases in the animals mentioned (240–253ab).

BHOJA:⁴⁰ (a) *Rājamārtanḍa*; (b) *Śālihotra*; (c) *Yuktikalpataru*.

(a) The *Rājamārtanḍa* contains a chapter on veterinary medicine.⁴¹

(b) The *Śālihotra*⁴² consists of 238 verses, which are for the greater part also found in Nakula's *Aśvacikitsita*.⁴³

The subjects dealt with are: horses of uniform and mixed colours (1–7), the whirls of hair (āvarta or bhramara; 8–27), the measures of the various parts of a horse's body (aśvapramāṇa; 28–34), the speed (vega; 35–44), rules for riding (ārohaṇa; 45–56), pathophysiology (śleṣmaraktalakṣaṇa; 57–80),⁴⁴ bloodletting (raktamokṣaṇa; 81–91), the regimen during the seasons (ṛtucaryā; 92–117), errhines (nasya; 118–122), poultices (piṇḍa; 123–128), the construction of stables (hayāgāra; 129–131),⁴⁵ and

some recipes (132–138).

Some verses are accompanied by short glosses.

(c) The *Yuktikalpataru*⁴⁶ contains sections on horses (aśvayukti; 181–197), elephants (gajayukti; 198–206), bulls (vṛṣayukti; 206–210), buffaloes (mahiṣayukti; 210–211), deer (mṛgayukti; 211–212), dogs (sārameyayukti; 213–214), and goats (ajayukti; 214–215).⁴⁷

The subjects of the aśvayukti are: the origin of horses and the various breeds, the measures of the various parts of their body, their colours, the determination of their age, various auspicious characteristics, the whirls of hair, major defects, signs foreboding death, rules for training and riding, the speed of horses, bloodletting, the regimen during the seasons, and various types of horses.

The gajayukti deals with types (jāti) of elephants, their qualities, and their defects. The yuktis on bulls, etc., describe types of these animals and their good or bad qualities.

The verses on horses are partly also found in Bhoja's *Śālihotra*.⁴⁸

Authorities quoted or referred to are: Bhoja (194, 201, 207, 212, 214), Garga (208), Gārgya (205, 212), Nakula (183), Pālakāpya (205), *Pārāśarasamhitā* (196), *Śālihotra* (197), Śaṅkha (212),⁴⁹ and Vātsya (195⁵⁰ and 207).⁵¹

BRHASPATI: (1) *Aśvalakṣaṇa*,⁵² (2) *Gajalakṣaṇa*.⁵³

BUBBUHA is mentioned as an expert in *Hastisāstra* in Śīlānka's *Caippaṇṇamahā-purisacariya*.⁵⁴

BUDDHISENA.⁵⁵

DAYASIṂHA: *Aśvaśāstra*.⁵⁶

DEVĪDATTA: *Aśvasaṃketacikitsākalikā*.⁵⁷

DĪPAṆKARA: *Aśvavaidyaka*.⁵⁸

DURLABHAGAṆA: *Siddhopadeśasaṃgraha*.⁵⁹

DURLABHARĀJA: ⁶⁰ (1) *Hastiparīkṣā*,⁶¹ (2) *Turaṅgaprabandha*.⁶²

GAJACIKITSĀ.⁶³

GAJALAKṢAṆA.⁶⁴

GAJAMŪTRĀṆJANAPRAYOGA.⁶⁵

GAJANIRŪPAṆA.⁶⁶

GAJAPĀLANACIKITSĀDI.⁶⁷

GAJAPARĪKṢĀ.⁶⁸

GAJAPRAŚAMSĀ.⁶⁹

GAJAŚĀNTI.⁷⁰

The GAJAŚĀSTRA⁷¹ is a treatise on elephants compiled by an unknown author; it is accompanied by a translation in Marāṭhī verse by Śarabhendra.⁷²

The work consists of two parts, a gajaśāstra in 756 verses, arranged in ten chapters (prakaraṇa), and a gajaśāstrānubandha, an appendix, of 696 verses, divided into a large number of chapters.⁷³

The *Gajaśāstra* opens with a maṅgalācaraṇa and a homage to Pālakāpya. Chapter

one (pālākāpyotpatti or pālākāpyacaritra; 106 verses) deals with stories about Pālākāpya.⁷⁴ Chapter two (digga-jatatsaṃtānatadvaṇṣīyagajalakṣaṇakathana; 64 verses) describes the origin of elephants in general, and that of the eight elephants of the quarters of the sky (digga) and their females in particular;⁷⁵ it also describes the characteristics of the descendants of the diggajas,⁷⁶ and adds some verses on the deities presiding over the different parts of an elephant's body. Chapter three (gajaśāpānugraha-kathana; 40 verses) explains particular characteristics and behavioural patterns of elephants as resulting from curses by Dīrghatapas, Agni, Brahmā, Varuṇa and Bhṛgu;⁷⁷ it ends with a story telling how Brahmā bestowed his favour on the elephants. Chapter four (vanagajalakṣaṇanirūpaṇa; 27 verses) deals with the eight major and eight minor forest regions where wild elephants are found and the characteristics of elephants roaming there.⁷⁸ Chapter five (gajavayolakṣaṇa; 99 verses) describes the stages of life of an elephant and mentions its name in each of them, from the first to the twelfth month of the first year of life, from the second to the tenth year, and from the second to the twelfth decade;⁷⁹ two other series of the stages of life are quoted from other treatises;⁸⁰ elephants are, according to their age, divided into the categories *uttama* (superior), *madhyama* (intermediate) and *adhama* (inferior); the chapter ends with verses on the stages of life quoted from the *Vaiśampāyanīya*.⁸¹ Chapter six (deśabhedabhinnaga-jalakṣaṇaga-jagrahaṇakathana; 36 verses) is concerned with the characteristics of elephants coming from different regions⁸² and with the capturing of elephants. Chapter seven (bhādrāmandamṛgasam-kīrṇagajalakṣaṇa; 74 verses) is about the *bhadra*, *manda*, *mṛga*, and mixed types of elephants.⁸³ Chapter eight (brahmādyamśavarṇachāyāgandhasattvasvaralakṣaṇa; 105 verses) treats classifications of elephants with regard to their *aṃśa*,⁸⁴ colour (*varṇa*),⁸⁵ sheen (*chāyā*),⁸⁶ smell (*gandha*),⁸⁷ character (*sattva*),⁸⁸ and trumpeting (*svara*),⁸⁹ the character types are described a second time on the basis of a work by Vyāsa.⁹⁰ Chapter nine (gajagatilakṣaṇādīkathana; 52 verses) deals with a variety of subjects: the gait (*gati*) of elephants,⁹¹ their *āvartas*, major defects (*mahādoṣa*),⁹² and measurements (*parimāṇa*).⁹³ Chapter ten (*bāhyāli*; 151 verses) is about the ways of being seated (*āsana*) on an elephant,⁹⁴ driving elephants by means of the goad (*śṛṅgprañidhi*),⁹⁵ the feet (*pādaprañidhi*)⁹⁶ and words (*vākprañidhi*),⁹⁷ the pruning of the tusks (*dantaccheda*),⁹⁸ thrusts with tusks (*dantāghāta*),⁹⁹ the seven beauties of must (*madaśobhā*),¹⁰⁰ the seven stages of must,¹⁰¹ the elephant-fight (*bāhyāli*) and -sport (*gajakrīḍana*), and the ways of pricking with the goad (*śṛṅghāta*).

The subjects dealt with in the *gajaśāstrānubandha*¹⁰² are: the praise of the force of elephants, capturing wild elephants,¹⁰³ the determination of their age, the female elephant and its pregnancy,¹⁰⁴ the *gandhahastin*,¹⁰⁵ the care for and training of elephants after capturing them,¹⁰⁶ the mounting of elephants, must, the twelve regions (*kṣetra*) of an elephant's body,¹⁰⁷ the price of elephants, the pruning of their tusks,¹⁰⁸ the treatment of diseases, the care for young elephants, the types of elephants called *bhadra*, *manda* and *mṛga*, rules for the administration of medicines, the properties of articles of food and medicinal substances, the treatment of various disorders, clysters, errhines, the administration of medicines to elephants of various ages, and the construction of stables.¹⁰⁹

Authorities and works quoted or referred to are:¹¹⁰ *Pālakāpya* (7.36), *Vaiśa-mpāyanīya* (5.86–99; 7.32–33; 9.25–32), *Vaiyyāsikya* (7.12–18, 25–31, 37–41; 10.42–44),¹¹¹ and *Vyāsa* (6.17; 8.3 and 85–95). The introductory verses state that the *Gajaśāstra* is based on the works by *Pālakāpya* and other sages.¹¹²

The author of the *Gajaśāstra* is unknown.

The work is probably later than *Nīlakaṇṭha's Mātāṅgalīlā*, which dates from the sixteenth century.¹¹³

GAJAVAIIDYA.¹¹⁴ This treatise is in the form of a dialogue between a king of Aṅga and *Pālakāpya*; it contains a great deal of mythological matter about elephants; it deals, among other things, with the methods of taming elephants and the treatment of their diseases.¹¹⁵

GAJĀVARTALAKṢAṆA.¹¹⁶

GAJĀYURVEDA.¹¹⁷

GAṆA, son of Durlabha: *Aśvāyurveda* or *Siddhayogasaṅgraha*.¹¹⁸

The *Aśvāyurveda* is a treatise on horses and their diseases; it is described as a saṃhitā of 6,000 verses, arranged in six sections (sthāna).

The names of these sections are: (1) lakṣaṇa, (2) rasavyākaraṇa, (3) kalpasūtra, (4) nidāna, (5) cikitsā, and (6) rahasya.¹¹⁹ The author states that he took his material from the works of Śālihotra, Suśruta, Garga, and Dinapati.

Some names of diseases mentioned in the introductory part are:¹²⁰ āmaṇḍaka, aṇḍacālī, aṇḍākṣa, aṇḍaskanna, añjalīkārīkā, aśrupāta, anuskanna,¹²¹ bhārābhiṣa-ṇṇa, budbuda, daṃśapaittika, drauṇīkā,¹²² ekāṅgaroga, kāca, kaphāṇḍa, koṣṭharāji, krimikoṣṭha,¹²³ liṅgita,¹²⁴ muñja, muñjajāla, nirāṇuka, parisrāvi, paṭala, pittāṇḍa,¹²⁵ prakoṭaka, prakuñcaka, praskanna,¹²⁶ pratitūrṇa, prāvāraka, puṇḍarīkagraha, pūyā-ṇḍa, raktāṇḍa, rātrivāta, siṅghānaka,¹²⁷ svacchanda, ulūkapaḍasthānaruj,¹²⁸ unnīta, vālādaka, vātabalāsaka,¹²⁹ viduragraha, vidyutkṣipta, and yoktrābhitāpa.

The *Sārasaṅgraha* prescribes meat broth in the treatment of vāta diseases.¹³⁰

Gaṇa's *Aśvāyurveda* is quoted in *Mitramiśra's Vīramitrodaya*.¹³¹ The same work contains verses from Gaṇa's *Aśvacikitsita*.¹³² The *Gaṇagrantha* by Gaṇa is quoted in *Nakula's Aśvaśāstra*.

A.C. Burnell assigned Gaṇa's work to the eleventh or twelfth century.¹³³

The author mentions the Rattaula, a tenth-century family of Jain princes of central Telingana,¹³⁴ and refers to the Muslims, which shows that he may indeed have lived in the eleventh or twelfth century.

GARGA: *Aśvāyurveda*.¹³⁵

GARUḌAPURĀṆA. One of the chapters of this work¹³⁶ deals with *aśvāyurveda* and *gajāyurveda*.¹³⁷ The verses on *aśvāyurveda* are based on *Nakula's Aśvacikitsita*.¹³⁸

GHORĀ NIDĀN, a treatise on horses and the treatment of their diseases in Hindi.¹³⁹

GODĀ VARAMIŚRA: *Hariharacaturaṅga*.¹⁴⁰ This work is an elaborate treatise on politics and military science, with special reference to the techniques of warfare¹⁴¹ and the army with its fourfold classification.

The work consists of about 3,000 verses, arranged in eight chapters (pariccheda), which are concerned with (1) elephants (gaja; 813 verses),¹⁴² (2) chariots (ratha; 14 verses),¹⁴³ (3) horses (asva; 837 verses),¹⁴⁴ (4) foot-soldiers (patti; 18 verses), (5) archery (dhanurvidyā; 399 verses),¹⁴⁵ (6) political science (nīti; 503 verses), (7) war (yuddha; 196 verses), and (8) playful exercises (krīḍā; 165 verses).

The chapter on elephants deals, after a series of introductory verses, with the following subjects:¹⁴⁶ deities associated with various parts of an elephant's body (17–19);¹⁴⁷ a eulogy of elephants (20–31); the mythical origin of the four classes (jāti) of elephants, called bhadra, manda, mṛga and miśra, in the four ages of the world called Kṛta-, Tretā-, Dvāpara-, and Kaliyuga (32–44);¹⁴⁸ the eight forest regions where elephants come from, the location of these forests, and the class of elephants to be found in each of these regions (45–61);¹⁴⁹ the characteristics of the classes of elephants, divided into sāttvika, rājasa and tāmasa types, according to the views of Br̥haspati and Pālākāpya (62–164); the classification of the mixed types of elephants according to the views of Yājñavalkya, Rājaputra,¹⁵⁰ Agniveśa, Gautama and Kāśyapa (165–199); division of the mixed types into superior and inferior categories (200–210); the five ways of communicating with elephants (vedita; 211–220); the classification of elephants with respect to their habitat (221–236); the classification of elephants according to the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra; 237–250); the size of bhadra, manda and mṛga elephants (251–258); terms designating the parts of an elephant's body (pradeśa; 258–317); auspicious and inauspicious characteristics of the main parts, together with their meaning (śubhāśubhalakṣaṇa; 318–539); the relative importance of defects, compared to each other (540–557); types of irritability (krodha; 558–562); the gait of elephants (gati; 562–566), their velocity (vega; 567–573), perspiration (sveda; 574–576), trumpeting and other sounds (svara; 577–589), and exhalation (niśvāsa; 590–594); the colours of elephants (varṇa; 594–602), their sheen (chāyā; 603–611),¹⁵¹ strength (bala; 612–624), and sattva (625–642); thrusts with the tusks (dantaghāta; 643–655);¹⁵² manda and its physiology (656–669); the seven stages (avasthā) of manda, and the views of Br̥haspati, Pālākāpya and Vyāsa on the subject (670–697); elephants in heat (698–711); elephants suitable for use in battle (sāmghrāmika; 712–738);¹⁵³ elephants suitable for use in the consecration ritual of a king (abhiṣeka; 739–742);¹⁵⁴ elephants unsuitable for use in battle (743–795);¹⁵⁵ signs indicating the life span of elephants (795–813).¹⁵⁶

The chapter on horses deals, after a series of introductory verses, with the following subjects: the mythical origin of horses, their division into brāhmaṇa, kṣatriya, vaiśya, śūdra, and mixed classes (varṇa), followed by the story relating how horses lost their wings (19–69);¹⁵⁷ the regions (āśraya) where horses are to be found (69–76); the fifty-four breeds (kula) of horses, named after these regions, together with their characteristics (77–211);¹⁵⁸ the characteristics of horses named after the four varṇas (212–248) and after mixed castes (249–267); the characters (sattva) of horses, divided into sāttvika, rājasa and tāmasa types, which correspond with the classes called bhadra, manda and mṛga (268–283);¹⁵⁹ the seven varieties of śuddha sattva, six varieties of rā-

jasa sattva, and three varieties of tāmasa sattva (284–307);¹⁶⁰ anatomy (pradeśa; 308–356);¹⁶¹ the measurements (māna) of various parts of a horse's body and their effects on the qualities (357–404);¹⁶² the five varieties of beauty (śobhā; 405–425); the types of perspiration (sveda; 426–429);¹⁶³ auspicious and inauspicious characteristics of the various parts of the body (śubhāśubha; 429–604); the whirls of hair (āvarta; 604–607), their shapes (sarṁsthāna; 608–613),¹⁶⁴ and their classification (614–619);¹⁶⁵ the description of these whirls and their auspicious or inauspicious meaning (620–722);¹⁶⁶ the colours (varṇa) of horses and their several varieties (723–732);¹⁶⁷ horses suitable for use in battle (733–749); defects in horses (750–762); the life span of horses¹⁶⁸ and the determination of their age by means of particular characteristics, especially of their teeth (762–812); the kṣetras in relation to the life span (813–826); signs indicating the life span (827–837).

Authorities and works referred to by Godāvāra in the *Harīharacaturāṅga* are, apart from those already mentioned: *Ācārācintāmaṇi* (6.501), *Advaitadarpaṇa* (6.502),¹⁶⁹ *Bhārata* (7.2),¹⁷⁰ *Brhaspati* (6.17), *Dhanurveda* (5.2),¹⁷¹ *Īśānasamhitā* (5.2),¹⁷² *Jayacintāmaṇi* (6.407),¹⁷³ *Manu* (6.17), *Nītikalpalatā* (6.500),¹⁷⁴ *Sārasaṅgraha* (5.3), *Śrīkodaṇḍacaturbhujā* (5.2),¹⁷⁵ *Tantracintāmaṇi* (5.383; 7.59–60),¹⁷⁶ *Uśanas* (6.17), and *Vīracintāmaṇi* (5.2).¹⁷⁷

The author mentions his name, Godāvāra, in the introductory verses (3 and 4) and in the last verse of his treatise.¹⁷⁸ Earlier works written by him are referred to; these works are: *Ācārācintāmaṇi*,¹⁷⁹ *Advaitadarpaṇa*,¹⁸⁰ *Nītikalpalatā*, and *Tantracintāmaṇi*.¹⁸¹ He also composed a *Sāṃudrikakāmadhenu*,¹⁸² *Jayacintāmaṇi*,¹⁸³ and *Yogacintāmaṇi*.¹⁸⁴

Godāvāra was a son of Balabhadra,¹⁸⁵ who was rājaguru of the Gajapati kings Puruṣottama Deva (A.D. 1466–1497) and his successor, Pratāparudra Deva.¹⁸⁶ Balabhadra was a son of Gaṅgādhara Mīśra, son of Jaleśvara Mīśra, son of Mr̥tyuñjaya Mīśra of the Kautsagotra.¹⁸⁷

The author was a minister (mantrivara) and preceptor (rājaguru) of Pratāparudradeva, who conferred on him the titles of kavipuṅgava and paṇḍitarāja; this king presented him with a white umbrella, called meghhāḍambara,¹⁸⁸ decorated with four golden lions and a golden pitcher. Godāvāra also bore the title of vājapeyayājñin.¹⁸⁹

Godāvāra's patron, Pratāparudradeva, has been identified as the Gajapati king of this name who ruled in Orissa from A.D. 1497 to about 1540.¹⁹⁰ This king appointed him to the same office as his father in about A.D. 1510.¹⁹¹

GOPĀLADĀSA KĀYASTHA: *Karāṭikautuka*.¹⁹²

GOTAMA: *Gavāyurveda*.¹⁹³

GOVAIDYA.¹⁹⁴

GOVAIDYAŚĀSTRA.¹⁹⁵

GUṆĀKARA: *Karicikitsāsāroddhāra*.¹⁹⁶

HAṂSADEVA: *Mrgapakṣiśāstra*.¹⁹⁷ This is a zoological treatise in Prakrit, describing 225 mammals and birds in 1,700 verses. The species enumerated are arranged in thirty-six groups (varga) and six main categories (three rājasa and three tāmasa categories).

The author, a Jain from South India, is assigned to the thirteenth century. He wrote

his treatise on the request of Saudadeva, the Jain king of Jinapura, who decided to stop hunting and to acquire knowledge about wild animals and birds.¹⁹⁸ The work has been translated into English,¹⁹⁹ but the Prakrit text has not been edited.²⁰⁰

The Sanskrit version of the *Mṛgapakṣiśāstra*²⁰¹ consists of two parts, preceded each by an introductory pūrvapīṭhikā (of thirty-four verses), and arranged in twenty-one sections (śreṇī) on mammals, respectively thirty-six sections on birds. Each section is devoted to one particular mammal or bird or to particular groups of these animals.

The sections of part one describe:²⁰² (1) *siṃhaguṇādi* (the lion and its varieties): *siṃha*,²⁰³ *mrgendra*, *pañcāsyā*, *haryakṣa*, *kesarin*, *hari*, *siṃhī* (35–106ab); (2) *vyāghraguṇādi*: *śārdūla*, *dvīpin* (the leopard),²⁰⁴ *vyāghra* (the tiger)²⁰⁵ (106cd–146); (3) *tarakṣuguṇādi*: *tarakṣu* (the hyena),²⁰⁶ *mṛgādāna* (the cheetah) (147–163ab);²⁰⁷ (4) *bhallūkaguṇādi*: *ṛkṣa*,²⁰⁸ *acchabhalla*,²⁰⁹ *bhallūka*²¹⁰ (163cd–208); (5) *gaṇḍakaguṇādi*: *gaṇḍaka*,²¹¹ *khadga*²¹² (209–232ab); (6) *gajaguṇādi* (the elephant): *dantin*, *dantāvala*, *hastin*, *dvirada*, *gaja*, *bhadrāgaja*, *mandagaja*, *mṛgagaja*, *saṃkīrṇagaja*, *matāṅgaja*, *padmin*, *ibha*, *stamberama*, *kariṇī* (232cd–339); (7) *aśvagūṇādi* (the horse): *turaṅga*, *aśva*, *ghotaka*, *arvant*, *vāha*, *gandharva*, *haya* (340–402); (8) *uśtragūṇādi*: *uśtra* (the camel),²¹³ *kramelaka*, *dāseraka*, *mahāṅga* (493–433); (9) *gardabhaguṇādi*: *gardabha*, *khara*,²¹⁴ *rāsabha* (434–461); (10) *varāhaguṇādi*: *varāha*,²¹⁵ *sūkara*, *kola*, *potrin*, *kiṭī*, *daṃṣṭṛin*, *bhūdāra*, *śvāvidh*,²¹⁶ *ghṛṣṭi*,²¹⁷ *śalya*²¹⁸ (462–501); (11) *mahiṣaguṇādi*: *mahiṣa* (the buffalo),²¹⁹ *lūlāya*, *vāhadviṣ*, *kāsara*, *sairibha* (502–543); (12) *vṛṣabhaguṇādi*: *ukṣan* (the bull), *balīvarda*, *ṛṣabha*, *vṛṣa*, *mahokṣa*, *saurabheya* (544–591); (13) *dhenuguṇādi*: *gaus* (the cow), *dhenu* (592–616); (14) *ajaguṇādi*: *aja*,²²⁰ *chāga*,²²¹ *meṣa*,²²² *vṛṣṇi*,²²³ *edaka*²²⁴ (617–655ab); (15) *harīṇaguṇādi*: *mṛga*,²²⁵ *kuraṅga*,²²⁶ *vātāyuharīṇa*,²²⁷ *harīṇa*,²²⁸ *vātāmṛga*,²²⁹ *kṛṣṇasāra*,²³⁰ *ruru*,²³¹ *nyāṅku*,²³² *śambara*,²³³ *raṅku*,²³⁴ *rohitākṣa*,²³⁵ *gokarṇa*,²³⁶ *eṇa*,²³⁷ *gandharva*²³⁸ (655cd–738ab); (16) *camūrugūṇādi*: *camūru*,²³⁹ *kandalī*, *cīna*, *priyaka*²⁴⁰ (738cd–751); (17) *kapiguṇādi*: *kapi*,²⁴¹ *plavaṅga*,²⁴² *śākhāmṛga*,²⁴³ *valīmukha*,²⁴⁴ *markaṭa*,²⁴⁵ *vānara*,²⁴⁶ *kīśa*,²⁴⁷ *vanaukas*,²⁴⁸ (752–804); (18) *śṛgālagūṇādi*: *śṛgāla* (the jackal),²⁴⁹ *mṛgadadhūrtaka*,²⁵⁰ *vaṇīcaka*,²⁵¹ *kroṣṭar*,²⁵² *jambuka*,²⁵³ *pheru*²⁵⁴ (805–837); (19) *biḍālagūṇādi*: *biḍāla*,²⁵⁵ *mārjāra*,²⁵⁶ *otu*,²⁵⁷ *ākhubhuj*,²⁵⁸ *medaka*²⁵⁹ (838–874ab); (20) *mūṣakasaśaṣaguṇādi*: *unduru*,²⁶⁰ *ākhu*,²⁶¹ *mūṣaka*,²⁶² *cucundara*,²⁶³ *śāśa*²⁶⁴ (874cd–910ab); (21) *vṛkaguṇādi*: *vṛka* (the wolf), *koka*,²⁶⁵ *iḥāmṛga*²⁶⁶ (910cd–941ab); *śvānaguṇādi*: *śvan*, *kukkura*, *śunaka*, *mṛgadāṃṣaka*,²⁶⁷ *sārameya*, *grāmyamṛga* (941cd–973ab); *upasaṃhāra* (summary) (973cd–988).

The sections of part two describe: (22) *haṃsādiguṇa*: *haṃsa*,²⁶⁸ *cakrāṅga*,²⁶⁹ *mānasavāsin*,²⁷⁰ *rājahaṃsa*,²⁷¹ *mallikākṣa*,²⁷² *kādamba*,²⁷³ *kalahaṃsa*²⁷⁴ (1–70); (23) *cakravākaguṇādi*: *koka*,²⁷⁵ *cakra*,²⁷⁶ *rathāṅga*²⁷⁷ (71–100); (24) *sārasabalākācako-raśārīcātākapaṃkṣiguṇādi*: *puṣkara*,²⁷⁸ *sārasa*,²⁷⁹ *balākā*,²⁸⁰ *sāraṅga*,²⁸¹ *cakora*,²⁸² *bṛhaccakora*,²⁸³ *śārāru*,²⁸⁴ *āṭī*,²⁸⁵ *cātaka*,²⁸⁶ *stokaka*²⁸⁷ (101–168ab); (25) *garuḍa-śyenaguṇādi*: *garuḍa*,²⁸⁸ *vainateya*,²⁸⁹ *pannagāri*,²⁹⁰ *śyena*,²⁹¹ *śaśādana*²⁹² (168cd–211ab); (26) *grdhṛabakaguṇādi*: *grdhra*,²⁹³ *dākṣāya*,²⁹⁴ *ātāyin*,²⁹⁵ *cilla*,²⁹⁶ *krauñca*,²⁹⁷ *baka*,²⁹⁸ *kahva*,²⁹⁹ *kuñca*³⁰⁰ (211cd–266ab); (27) *kākaguṇādi*: *kāka*,³⁰¹ *karāṭa*,³⁰² *balipuṣṭa*,³⁰⁴ *sakṛtpṛaja*,³⁰⁵ *dhvāṅka*,³⁰⁶ *ātmaghoṣa*,³⁰⁷ *parabhṛta*,³⁰⁸ *vāyasa*,³⁰⁹ *cira-ñjivin*,³¹⁰ *maukuli*,³¹¹ *droṇakāka*,³¹² *kākola*³¹³ (266cd–335); (28) *ulūkaghūkaguṇādi*:

ulūka,³¹⁴ vāyasārāti,³¹⁵ pecaka,³¹⁶ kauśika,³¹⁷ ghūka,³¹⁸ divābhīta,³¹⁹ niśātana³²⁰ (336–386); (29) śukakokilaguṇādi: śuka,³²¹ kīra,³²² śārikā,³²³ vanapriya,³²⁴ parabhr̥ta,³²⁵ kokila,³²⁶ pika³²⁷ (387–451); (30) mayūraguṇādi: mayūra (the peafowl),³²⁸ barhin, nīlakaṇṭha, bhujaṅgabhuja, śikhāvala, kekin (452–499); (31) pārāvatacāṣaguṇādi: pārāvata,³²⁹ kalarava,³³⁰ kapota,³³¹ cāṣa,³³² kikiḍivi³³³ (500–544ab); (32) kukkutaḡuṇādi: kṛkavāku,³³⁴ tāmracūḍa,³³⁵ kukkuṭa,³³⁶ caraṇāyudha³³⁷ (544cd–571); (33) caṭakakareṭupakṣiguṇādi: caṭaka,³³⁸ kalavinka,³³⁹ karkareṭu,³⁴⁰ kareṭu³⁴¹ (572–598); (34) lohapr̥ṣṭhādārvāghāṭapakṣiguṇādi: lohapr̥ṣṭha,³⁴² kuraṇṭaka,³⁴³ dārvāghāṭa,³⁴⁴ śatapattraka³⁴⁵ (599–628); (35) khañjarīṭādi: khañjarīṭabharadvājakaṇṭapakṣiguṇādi: khañjarīṭa,³⁴⁶ khañjana,³⁴⁷ vyāghrāṭa,³⁴⁸ bharadvāja,³⁴⁹ kaṇṭika,³⁵⁰ bhṛṅga,³⁵¹ dhūmyāṭa³⁵² (629–672ab); (36) plavāḍipakṣiguṇa: plava,³⁵³ tittiri,³⁵⁴ kukkubha,³⁵⁵ lāva,³⁵⁶ koyaṣṭi,³⁵⁷ hārīta³⁵⁸ (672cd–700).

The treatise ends with a śāstraparīsamāpti (701–717).

HASTYĀYURVEDA: anonymous.³⁵⁹

HEMASŪRI: *Aśvaśāstra*.³⁶⁰

HIMMATA BAHĀDURA: *Aśvaphalaprakāśa*.³⁶¹

INDURĀJA.³⁶²

INDUSENA: *Sārasaṃgraha*.³⁶³

JAYADATTA: *Aśvavaidyaka*,³⁶⁴ a treatise in 1,664 verses,³⁶⁵ arranged in sixty-eight chapters (adhyāya).

A table of contents is found in chapter one (6–15). Chapters two to sixty-eight deal with: anatomy (pradeśa; 2);³⁶⁶ good and bad characteristics of horses (3.1–28),³⁶⁷ their whirls of hair (āvarta; 3.29–70),³⁶⁸ the deities presiding over the various parts of a horse's body (3.70–72), the puṇḍras (3.73–81),³⁶⁹ the puṣpas (3.82–92),³⁷⁰ the trot (gati; 3.93–97), the colour of horses (3.98–124),³⁷¹ their neighing (svara, heṣita; 3.125–134), major defects (mahādoṣa) in horses (3.135–159),³⁷² portents (utpāta; 3.160–170),³⁷³ the sheens (chāyā) of horses (3.171–179),³⁷⁴ their characters (sattva; 3.180–181),³⁷⁵ the measures of their limbs (pramāṇa; 3.182–194); their span of life (āyus; 4.1–16), the determination of their age by means of the development of their teeth and the meaning of various characteristics of their teeth (vayas; 4.17–34),³⁷⁶ the regional division of their body (daśā, kṣetra; 5); the racial classification of horses (6); their classification according to the four varṇas, sattva and śakti (7.1–10), the field of pasture (raṅgabhūmi; 7.11–12), rules for riding (7.13–73); the treatment of infertility in mares (8); the characteristics of a pregnant mare (9); the care for a mare after dropping its foal (10.1–12), the purification of a mare's mūlka (10.12–17), the care for the newborn foal (10.18–23); rules for the dosage of medicines (11); materia medica and technical terms (nighaṇṭu; 12);³⁷⁷ rules for feeding during the various seasons (13); the application of caustics (kṣāradāha; 14.1–6), cauterization (dāha; 14.7–20), the employment of surgical instruments (14.21–23); bloodletting (15); clysters (nirūha and anuvāsana; 16); errhines (nasya; 17);³⁷⁸ sudation (sveda; 18); oleaginous drinks (sneha; 19); medicated oils (20); medicated ghees (21); the treatment of fatigue (śrāntopacāra; 22); signs foreboding death (ariṣṭa; 23–25); mṛgaroga (26);³⁷⁹ the

causes and signs of excitement of the three doṣas (27); a list of diseases (28); diseases of mouth and throat (29);³⁸⁰ diseases of the eyes (30);³⁸¹ diseases of the head (31); lameness (laṅgita; 32);³⁸² diseases of the ears (33); cough (34); hiccup and shortness of breath (35); wounds and ulcers (vraṇa; 36); siṅghānaka (37);³⁸³ ghrṇiroga (38);³⁸⁴ diseases of the legs and hoofs (pādaroga; 39);³⁸⁵ fever (40); indigestion (ajīrṇa; 41); diarrhoea (42); colic (śūla; 43);³⁸⁶ udāvarta (44); praskanna (45);³⁸⁷ worms (kṛmikoṣṭha) and śleṣmakōṣṭha (46); mūtragraha (47);³⁸⁸ kuṣṭha (48);³⁸⁹ swellings (śoṭha; 49); disorders of scrotum and testicles (muṣkaroga; 50);³⁹⁰ aunītaroga (51);³⁹¹ udara (52);³⁹² haemorrhoids (53); utkarṇaka (54);³⁹³ vātavayādhi (55);³⁹⁴ unmāda (56);³⁹⁵ disorders by grahas (57);³⁹⁶ śoṣa (58);³⁹⁷ vātabalāsaka (59);³⁹⁸ vyāpad (60);³⁹⁹ toxicology (61); convulsions (āpasmāra; 62); ṣaṭpadībhakṣa (63);⁴⁰⁰ signs indicating curability of a disease or its incurability (64); the constitutions (prakṛti; 65); some kalpas (66–68).⁴⁰¹

The theoretical concepts found in the chapters on diseases and their treatment are the same as those in human āyurveda. Many diseases are divided into doṣic and āgantū types.⁴⁰² The types of treatment do not differ much from those in human āyurveda. Magical and religious elements occur in the chapter on grahas, as well as in that on the rules for riding a horse (7.37–43).⁴⁰³

Jayadatta often refers to Śālihotra as the foremost authority on the science of horses.⁴⁰⁴

Jayadatta is quoted by Bhoja,⁴⁰⁵ Cakrapānidatta in his commentary on the *Caraka-saṃhitā*, Mitrāmīśra in the *Vīramitrodaya*,⁴⁰⁶ in the *Śārngadharapaddhati*, and by Ṭoḍara in his *Āyurvedasaukhya*.⁴⁰⁷

Jayadatta mentions his name and that of his father, Vijayadatta, in the introductory verses of his work (1.4). The colophons call him a great vassal (mahāsāmanta).

The only reliable dates are A.D. 1364, the year of completion of the Cambridge MS, and A.D. 1424, the year in which the India Office MS was written. In a number of articles on horses, P.K. Gode concluded that Jayadatta wrote his work between A.D. 700/800 and 1200/1300.⁴⁰⁸ A. Rahman repeats that the treatise must have been composed between 800 and 1200.⁴⁰⁹ The terminus ante quem is A.D. 1300 according to A.-M. Blondeau.⁴¹⁰ M. Vallauri places the author in the fourteenth or fifteenth century.⁴¹¹

JAYADEVA: Śālihotra or Aśvavaidyaka.⁴¹²

JAYADRATHA: Aśvaśāstra.⁴¹³

JINADĀSA⁴¹⁴ was the author of: (1) *Gajaprabandha*, also called *Gajaparīkṣā* and *Hastiparīkṣā*;⁴¹⁵ (2) *Turaṅgaprabandha*.⁴¹⁶ Both works, on elephants and horses respectively, were completed in A.D. 1158.

The same author wrote a *Svapnaśāstra*⁴¹⁷ on auspicious and inauspicious dreams, and began writing a *Sāmundrikatilaka*,⁴¹⁸ also called *Strīpuruṣalakṣaṇa*;⁴¹⁹ the latter treatise was completed by his son, Jagaddeva.⁴²⁰

Jinadāsa was a learned Jain householder, who lived in Gujārāt and held the office of minister during the reigns of the Caulukya kings Kumārapāla (A.D. 1143–1174)⁴²¹ and Bhīmadeva II (A.D. 1178–1239).⁴²²

KĀHNAPRABHUVAIDYA: *Āśvasāra*.⁴²³

KALHAṆA: *Āśvasārasamuccaya* or *Sārasamuccaya*.⁴²⁴ Kilhaṇa's *Āśvasārasamuccaya* and *Sārasamuccaya* are quoted in Mitramiśra's *Vīramitrodaya*.⁴²⁵

KAUṬILYA: *Arthaśāstra*.⁴²⁶

KĪRTIVARMAN: *Govaidya*.⁴²⁷

KUMĀRA: *Gajacikitsā*.⁴²⁸

MAHĀNĀGA: *Kaḷpanāratnavyākhyāna*: a commentary on Śivarāmabhūpati's *Kaḷpanāratna*, a work on elephants.⁴²⁹

MAHEŚVARA: *Gajacikitsā*.⁴³⁰

MALLADEVA PAṆḌITA: *Sārasindhu*.⁴³¹ A *Vaidyakalpataru* may be by the same author.⁴³²

MĀNAPRIYAMATA.⁴³³

MATSYAPURĀṆA.⁴³⁴

MĀṬṬU VĀKAṬAMUM MĀṬṬU AṆKA AṬAIYĀLAMUM, two Tamiḷ treatises on the diseases of cattle and their treatment.⁴³⁵

MOTĪRĀMA AUDĪCYA: *Āśvagovṛṣalakṣaṇa*.⁴³⁶

NAKULA:⁴³⁷ (1) *Āśvacikitsita*; (2) *Āśvaśāstra*.

(1) The *Āśvacikitsita*⁴³⁸ consists of 423 verses, arranged in eighteen chapters (adhyāya).⁴³⁹

Chapter one is called praśnādhyāya; the introductory verses invoke the blessing of Śālihotra, son of Turāṅgahoṣa, and mention that the abbreviated version of Śālihotra's treatise, as made by Nakula,⁴⁴⁰ will be expounded; a short table of contents enumerates the subjects of the chapters of the work;⁴⁴¹ the remaining part (1.5–21) is devoted to the mythical story telling how horses lost their wings.⁴⁴²

The subjects of the other chapters are: the breeds (jāti) of horses,⁴⁴³ and a number of behavioural characteristics considered to be auspicious or inauspicious (2), the colours of horses (varṇa; 3),⁴⁴⁴ the whirls of hair (āvarta; 4),⁴⁴⁵ the development of a horse's teeth (dantodbheda; 5), the measures of the limbs (sarvāvayavapramāṇa; 6), the speed of horses (vega; 7), rules for riding (ārohaṇa; 8), the utility of horses for different purposes and related subjects (vāhana; 9), pathophysiology (dhātuparīkṣā; 10),⁴⁴⁶ the regimen during the seasons (ṛtucaryā), bloodletting (11),⁴⁴⁷ errhines (nasya; 12), poultices (piṇḍa; 13), medicated ghees (ghṛta; 14), decoctions (kvātha; 15), toxicology (viṣa; 16), and the construction of stables (āśvaśālā, hayāgāra; 18).⁴⁴⁸

Diseases are not described in the *Āśvacikitsita*.

Some noticeable medicinal substances are: bhrāmari (13.1), gaṇḍakī (13.12 and

21), pācā (15.10), śataghnī (13.2), and viṣakaṅkolī (16.12).

Śālihotra is frequently referred to as the foremost authority.⁴⁴⁹

(2) The *Aśvaśāstra*⁴⁵⁰ is a treatise in verse, interspersed with prose, of about 650 units, divided into twenty-six chapters.

The subjects are: introduction,⁴⁵¹ the praise of horses, a hymn of praise (stotra) to Raivata,⁴⁵² the mythical story telling how horses lost their wings,⁴⁵³ anatomy (pradeśādhyaya),⁴⁵⁴ auspicious and inauspicious characteristics (aṅgalakṣaṇa),⁴⁵⁵ the eight types of characteristics of horses (aśvalakṣaṇa),⁴⁵⁶ the regional divisions (daśa, kṣetra) of their body, the whirls of hair (āvarta),⁴⁵⁷ horses of mixed colours,⁴⁵⁸ the puṇḍras,⁴⁵⁹ the puṣpas,⁴⁶⁰ the neighing (heṣita) of horses, their smell,⁴⁶¹ sheen,⁴⁶² gait (gati)⁴⁶³ and character (sattva),⁴⁶⁴ the main defects (mahādoṣa), the colour of the palate (tāluraṅga) in newborn colts, the various breeds (kula) of horses,⁴⁶⁵ the determination of the age of horses by means of their teeth (vayo jñāna),⁴⁶⁶ the names and descriptions of horses with uniform or mixed colours,⁴⁶⁷ horses suitable to particular riders and especially to the king,⁴⁶⁸ the span of life (āyurlakṣaṇa), portents (utpāta) in connection with horses, the training of horses (vahanaśikṣā),⁴⁶⁹ the trot (dhārā) of horses, and rules for riding (āroha).⁴⁷⁰

The edition of Nakula's *Aśvaśāstra* ends with extracts from Malladevapaṇḍita's *Sārasindhu*⁴⁷¹ and another *Sārasindhu*, also called *Śālihotravaiśampāyanīya*.⁴⁷²

Authorities referred to are Garga (2, 90), Śālihotra (2, 10, 19, 21, 65, 81, 91), and Suśruta (2).⁴⁷³

Nakula's *Aśvaśāstra* is quoted in Mitramiśra's *Vīramitrodaya*.⁴⁷⁴

Nakula is quoted or referred to in Basava's *Śivatattvaratnākara*, Bhoja's *Yuktika-lpataru*,⁴⁷⁵ Dhanvantari's *San̥nipātakalikā*,⁴⁷⁶ the *Haṃsarājānidāna*, Himmata Bahādura's *Aśvaphalaprakāśa*, the *Śāringadharapaddhati*,⁴⁷⁷ *Subhāṣitaratanidhi*,⁴⁷⁸ *Sūktiratnahāra*,⁴⁷⁹ and Ṭoḍara's *Āyurvedasaukhya*.⁴⁸⁰

Nothing is known about the author of the works attributed to Nakula. The *Māhābhārata* mentions the expertise of Nakula, the fourth of the Pāṇḍava brothers, in the art of training and managing horses, taught to him by Droṇa.⁴⁸¹

Medical works attributed to Nakula are: *Vaidyakaśarvasva*,⁴⁸² *Cikitsāsāṃgraha*, and *Sārasāṃgraha*.⁴⁸³ He is also credited with a rasayoga against snāyukaroga.⁴⁸⁴

Nakula's works are assigned to the period about A.D. 1000⁴⁸⁵ or are said to be earlier than A.D. 1000.⁴⁸⁶ The earliest MS of the *Aśvacikitsita* dates from A.D. 1864.⁴⁸⁷ A MS of Nakula's *Śālihotra*⁴⁸⁸ was completed in A.D. 1635/36. The earliest MS of the *Aśvaśāstra* is from A.D. 1617/18.⁴⁸⁹

NALARĀJA: *Aśvaparikṣaṇa*.⁴⁹⁰

NĀRADA: (1) *Aśvaśānti*,⁴⁹¹ (2) *Gajaśānti*.⁴⁹²

(2) The *Gajaśānti* is divided into nine chapters (paṭala); it is written in the form of a conversation between Nārada as a teacher and Devala, also called Vāsava, as his pupil.

The chapter headings are, according to Umāpatyācāra's commentary: (1) gajasṛṅgikramakathana (28 verses): the creation of the mythical elephants of the eight quarters of the sky⁴⁹³ and how they lost their wings, (2) gajātyaṃṣanirūpaṇa (105

verses): the aṃśa typology (sixteen uttama, six madhyama and six adhama types), (3) gajaprayojanagajasthānanirūpaṇa (23 verses): uses of elephants, places where they are found, (4) gajabandhanasthānanirdeśakathana (53 verses): places where elephants may be captured, (5) gajabandhanaracanākramakathana (73 verses): methods of capturing (the stockade, vāribandha, vaśābandha = anugatabandha, and gartabandha, i.e., the pit method), (6) gajāñayanakramahastipālalakṣaṇakramakathana (13 verses): the removal from the stockade (āñayana)⁴⁹⁴ and the desired characteristics in elephant keepers, (7) gajaśālākṣaṇakathana (27 verses): the construction of stables, (8) gajavayaḥkāryakramakathana (20 verses): the gestation period and a mother's care for her young during the first five months of its life, and (9) gajaśikṣākramanirūpaṇa (105 verses): the training of elephants, beginning when they are three years old, characteristics developing during the years of their growth, and the course of training.

Information on the author and his date is not available.

Umāpatyācāra mentions in the introductory verses of his commentary the following authorities on gajaśāstra: Agniveśya, Bhṛgu, Bṛhaspati,⁴⁹⁵ Gajanātha, Gautama, Kolāhala,⁴⁹⁶ Mṛgacarman, Nārada, Pālakāpya, Raibhya, Vālakhiya,⁴⁹⁷ and Vyāsa.⁴⁹⁸ Umāpatyācāra's commentary is very elaborate. Sources are not mentioned.

NĀRĀYAṆA: *Hayalīlāvati*.⁴⁹⁹

NĀRĀYAṆA DĪKṢITA: *Gaja(saṃ)grahaṇaparakāra*, a work on the capture and training of wild elephants in 881 āryā verses, arranged in five chapters (āśvāsa).⁵⁰⁰

Chapter one (1–29) is in praise of elephants. Chapter two (30–373) describes ten methods of capturing elephants.⁵⁰¹ Chapter three (374–423) enumerates the regions where elephants are found. Chapter four (424–664) deals with the training of elephants.⁵⁰² Chapter five (665–881) is about the construction of stables, the feeding of and care for elephants, the periodical evaluation of their worth (714–753),⁵⁰³ types of elephants according to their country of origin (kula) and other characteristics, auspicious and inauspicious characteristics, and the yearly show of the elephants of the king for the entertainment of the public (754–881).

The methods described for the capture of wild elephants are:⁵⁰⁴ (1) vṛtibandha (capture in stockades; 30–53), (2) vṛkṣabandha (capture by enclosing within a smaller wooded area; 56–101),⁵⁰⁵ (3) rajjubandha or śṛṅkhalābandha (capture by means of nooses or chains), also called ālavāla- and paṅkabandha (capture through the device of water-basins or sticky mud) (102–130), (4) vāribandha (capture by means of a moat filled with water; 131–173), (5) anugata- or kariṇībandha (capture of young elephants by using trained female elephants as decoys; 174–203),⁵⁰⁶ (6) laghugarta- and (7) nimnāvaṭabandha (the pit method for capturing single elephants; 204–264),⁵⁰⁷ (8) (pra)codaṇā- or preraṇābandha (capture by driving; 266–300),⁵⁰⁸ (9) vana- or udyānabandha (the same as anugatabandha, but taking place in the city-park instead of in the woods; 301–331), (10) pāñcālīkābandha (capture by using puppets of young elephants; 332–371).⁵⁰⁹

The editor of the text is of the opinion that methods three, four and eight form together the practice called khedda until recent times. Others regard the stockade method

as khedda.⁵¹⁰

No information is available on the author and the date of composition.

NĪLAKAṆṬHA: *Mātaṅgalīlā*⁵¹¹

This treatise on elephantology consists of 253 verses,⁵¹² arranged in twelve chapters.

Chapter one (40 verses) deals with: the encounter of Romapāda, king of Aṅga,⁵¹³ with the sage Pālākāpya,⁵¹⁴ son of Sāmagāyana, who expounds to him the science of elephants; the mythical origin of elephants and their banishment to earth; the birth of Pālākāpya; the various natural types (jāti) of elephants,⁵¹⁵ the names for an elephant,⁵¹⁶ and related subjects. Chapter two (17 verses) is about favourable and chapter three (7 verses) about unfavourable marks.⁵¹⁷ Chapter four (6 verses) describes marks of longevity, and chapter five (23 verses) the stages of life.⁵¹⁸ Chapter six (13 verses) is concerned with the measurements of the various types of elephant⁵¹⁹ and with anatomy, chapter seven (3 verses) with their price, and chapter eight (25 verses) with their character types (sattva).⁵²⁰ Chapter nine (23 verses) describes the state of excitement in elephants, called must (mada), and its seven stages.⁵²¹ Chapter ten (14 verses) is about the capture of elephants,⁵²² chapter eleven (51 verses) about their keeping and their daily and seasonal regimen.⁵²³ Chapter twelve (31 verses) deals with elephant-drivers (mahouts)⁵²⁴ and related subjects.

An authority referred to is Brhaspati (4.4).

Gaṇapati Śāstrī, who edited Nīlakaṇṭha's treatise, says that it is very well known in Kerala, and guesses on this ground that its author may have been a native of that region.⁵²⁵

The *Mātaṅgalīlā* is regarded as a work by Nīlakaṇṭhamūssatu,⁵²⁶ who lived in the latter half of the sixteenth century and belonged to the Tirumaṅgalam house of Kerala; he studied under Brahmānanda Yati.⁵²⁷

PADMARASA: *Hayasārasamuccaya*.⁵²⁸

PĀLAKĀPYA: *Hastyāyurveda*.⁵²⁹

The *Hastyāyurveda* is a comprehensive treatise on elephant-medicine.⁵³⁰ It is composed partly in verse, partly in prose,⁵³¹ and is divided into four sections: mahārōgasthāna (eighteen chapters), kṣudrārōgasthāna (seventy-two chapters), śalyasthāna (thirty-four chapters), and uttara- or parivārasthāna (thirty-six chapters).⁵³² It is written in the form of a dialogue between Romapāda, king of Aṅga,⁵³³ who, surrounded by many sages, in his capital Campā,⁵³⁴ is instructed in the science of hastyāyurveda by the greatest authority on this subject, Pālākāpya. The structure of the work resembles in some respects that of the *Caraka-* and *Suśrutasaṃhitā*⁵³⁵ and is also reminiscent of Bharata's *Nāṭyaśāstra*.⁵³⁶ Each chapter opens with particular questions by Romapāda which are answered by Pālākāpya. The way in which the contents of the *Hastyāyurveda* are arranged differs from that of the classical saṃhitās. By far the larger part of the general subjects is not dealt with in the first sthāna, but in the third and fourth ones. The basic medical concepts are the same as those in human

āyurveda, but much less space is devoted to them. A nidāna-, śārīra-, and kalpasthāna are absent. The nidāna and treatment of a disease are in all cases found in one and the same chapter. The properties of medicinal substances are not enumerated, although those of articles of food are elaborately described.

Most of the subjects of the anonymous *Gajaśāstra* are either absent or much more concisely discussed. The medical science, applied to elephants and their diseases, is the major concern of the *Hastāyurveda*.⁵³⁷

Section one is called mahārogasthāna, which conveys the impression that the diseases it describes were considered to be the major diseases of elephants.⁵³⁸

Chapter one (vanānucarita) deals with stories about Pālakāpya, his encounter with Romapāda, and the exposition of the hastāyurveda by the former to the latter. Chapter two (annasamācāra) is about the care for and feeding of elephants. Chapter three (sātmayāsātmayavinīścaya) is concerned with the fifteen causes of death in wild elephants, and with their natural food. Chapter four (śāstrasamgraha) gives a table of contents of the treatise, chapter by chapter. Chapter five (gajalakṣaṇavinīyāsa) contains a eulogy of elephants and verses on the care for them. Chapter six (śiṣyopanayana) is about the initiation of pupils.⁵³⁹ Chapter seven (rogavibhakti) contains interesting classifications of the diseases of elephants. Chapter eight (jvarotpatti) tells mythical stories about the origin of fever. Chapters nine to eighteen deal with a series of diseases and their treatment: jvara (fever; 9),⁵⁴⁰ skanda (10),⁵⁴¹ pāṇḍuroga (11),⁵⁴² ānāha (12),⁵⁴³ mūrkhā (13),⁵⁴⁴ śīroroga (diseases of the head; 14),⁵⁴⁵ pādāroga (diseases of the legs; 15),⁵⁴⁶ vyāpad (disorders caused by the wrong employment of particular articles of food or medicinal preparations; 16),⁵⁴⁷ śopha (17),⁵⁴⁸ and akṣīroga (eye diseases; 18).⁵⁴⁹

Section two is called kṣudrarogasthāna.⁵⁵⁰ Its subjects are: vomathu (vomiting; 1), atisāra (2),⁵⁵¹ madana jagdhaka (3),⁵⁵² tṛṇaśoṣin (4),⁵⁵³ karmātinīta (5),⁵⁵⁴ viṣa (poisoning; 6–8),⁵⁵⁵ digdhavidhā (disorders in elephants pierced by poisoned arrows; 9), sarpadaṣṭa (snake-bites; 10), sphoṭikā (boils and bites by spiders; 11), apavādabaddha (12),⁵⁵⁶ pūrvābaddha (13),⁵⁵⁷ visarpa (14),⁵⁵⁸ hrdayasphāhana (15),⁵⁵⁹ vālākṣāṇī (16),⁵⁶⁰ medhṛakṣāṇī (17),⁵⁶¹ hastonmathita (18),⁵⁶² udāvarta (19), utkarnaka (20),⁵⁶³ vātāgati (21),⁵⁶⁴ manyāgraha (22),⁵⁶⁵ madakṣīṇa (23),⁵⁶⁶ kṛśa (24),⁵⁶⁷ balakṣīṇa (25),⁵⁶⁸ śleṣmābhiṣanna (26),⁵⁶⁹ vanasātmayānulomika (27),⁵⁷⁰ talakāṣī (28–29),⁵⁷¹ galagraha (30),⁵⁷² tṛṣṇā (thirst) and siddhārthaka (31),⁵⁷³ bhūtagraha (32),⁵⁷⁴ unmāda (insanity; 33), apasmāra (epilepsy; 34), vātakuṇḍalikā (35),⁵⁷⁵ bhāronmathita (36),⁵⁷⁶ lupta (37),⁵⁷⁷ pattrakṛmi (38),⁵⁷⁸ uraḥkṣata (39),⁵⁷⁹ śoṇitāṇḍa (40),⁵⁸⁰ yavagaṇḍāśiras (41),⁵⁸¹ carmakīla (warts; 42), vṛddha or jarā (old age; 43), avasāda (lassitude; 44), jātharaka (45),⁵⁸² bālācikitā (diseases of young elephants, separated from their parents; 46), rātrikṣipta (47),⁵⁸³ mūtrasaṅga (48),⁵⁸⁴ sūtikāvāta (49),⁵⁸⁵ dantaroga (diseases of the teeth; 50), cetobhraiṇśa (51),⁵⁸⁶ śūla (52),⁵⁸⁷ śārada (53),⁵⁸⁸ madhumakṣikādaṣṭa (stings by honeybees; 54), chavidoṣa (55),⁵⁸⁹ mṛttikābhakṣaṇa (56),⁵⁹⁰ grahaṇidoṣa (chronic diarrhoea; 57), āma (58),⁵⁹¹ kṛmikoṣṭha (infestation of the intestinal tract by worms; 59),⁵⁹² kṣaya (60),⁵⁹³ mada (61),⁵⁹⁴ karṇavālākṛmi (parasites living in the ears and on the hairs of the tail; 62), karṇaroga (diseases of the ears; 63), abhaktacchanda (want of appetite; 64), bhaktagrāsoparodha (65),⁵⁹⁵ droṇikāśopha (66),⁵⁹⁶ atiyāta (67),⁵⁹⁷ gulma (swelling of the abdominal viscera; 68),

hṛdroga (diseases of the heart; 69), and gātraroga (70–72).⁵⁹⁸

Section three, called śalyasthāna, is mainly concerned with disorders requiring surgical treatment and with surgical procedures; it also deals with embryology and anatomy.⁵⁹⁹

Its subjects are: vṛaṇa (sores and ulcers; 1), sadyahkṣata (flesh wounds; 2–3),⁶⁰⁰ ṣaḍatyaya (4),⁶⁰¹ vṛaṇopakrama (5),⁶⁰² dvādaśopakrama (6),⁶⁰³ garbhasaṃbhava (embryology; 7), garbhāvakraṇti (8),⁶⁰⁴ śarīravicaaya (anatomy; 9), śaṣṭrāgnipra-ṇidhi (sharp instruments and cautery; 10),⁶⁰⁵ yantravidhi (blunt instruments; 11), śalyoddharaṇa (12),⁶⁰⁶ vidradhi (abscesses; 13), vṛaṇa (the treatment of wounds and sores; 14),⁶⁰⁷ nāḍivṛaṇa (fistulas and sinuses; 15), śīrāvūhavyadha (16),⁶⁰⁸ dantanāḍi (dental sinuses; 17), adhikadanta (supernumerary teeth; 18), śīrāccheda (19),⁶⁰⁹ marmapramāṇa (20),⁶¹⁰ eraṇḍaka (21),⁶¹¹ marmavidha (injuries to vital points; 22–23), doṣavicaaya (24),⁶¹² agnidagdha (burns; 25), lūtā (26),⁶¹³ viṣakīṭa (bites by poisonous insects; 27), vyāladaṣṭa (snake-bites; 28), pradeśajñāna (29),⁶¹⁴ śaṣṭraavidhi (30),⁶¹⁵ kṣāra (caustics; 31), bhagna (fractures; 32), mūḍhagarbha (malpositions of the foetus; 33) and dantoddharaṇa (34).⁶¹⁶

Section four, the uttarasthāna, is about the following subjects: snehapāna (the administration of oleaginous substances; 1–2), annapānavidhi (foods and drinks; 3),⁶¹⁷ snehavidhi (the procedures for the administration of oleaginous substances; 4), basti (enemas; 5), śālāvidhāna (the construction of stables; 6),⁶¹⁸ nasya (errhines; 7), yavasa (8),⁶¹⁹ ariṣṭa (signs foreboding death; 9), dantakalpanā (10),⁶²⁰ rasavīryavipāka (11), ikṣudāna (feeding with sugarcane; 12), nasya (errhines; 13), añjana (collyria; 14), ṛtucaryā (the regimen during the seasons; 15), kāryākāryavidhi (16),⁶²¹ anupāna (postprandial drinks; 17), sauvīrakapānavidhi (18),⁶²² surāpratipānavidhi (19),⁶²³ gugguluvīdhi (the administration of guggulu; 20), kṣīradāna (the administration of different kinds of milk; 21), śrīgajasambhava (22),⁶²⁴ kimarthaḥ (23),⁶²⁵ paricāraka (24),⁶²⁶ trividhi (25),⁶²⁷ pathyāpathyavicāra (wholesome and unwholesome substances; 26), karīṣamūtra (27),⁶²⁸ laṣunakalpa (28),⁶²⁹ lavaṇayoga (29),⁶³⁰ pāṃśūdāna (30),⁶³¹ madāvasthā (31),⁶³² nāgatanukagrāha (32),⁶³³ jalahastin (33),⁶³⁴ jalaukā (leeches; 34),⁶³⁵ upasarga (35),⁶³⁶ and gajaśānti (36).⁶³⁷

The first chapter of the treatise mentions a large number of sages who assemble at the court of Romapāda in order to be instructed in the science of haṣṭyāyurveda. Their names are: Acūda, Agastya, Agniveśya, Āṅgīrasa, Arimeda, Atri, prince Bāṣkali, Bhāradvāja, Bhārgava, Bhṛgu, Brhaspati, Cyavana, Dīrgha,⁶³⁸ Gārgya, Gautama,⁶³⁹ Hira-ṇya,⁶⁴⁰ Jamadagni, Kāṅkāyana, Kāpya, Kāśyapa, Kratu,⁶⁴¹ Kumuda, Māṇḍavya, Marīci, Mataṅga,⁶⁴² Mrgaśarman,⁶⁴³ Nārada,⁶⁴⁴ Parāśara,⁶⁴⁵ Parikara, Pulaha,⁶⁴⁶ Pulastya, Raibhya,⁶⁴⁷ Sārasvata,⁶⁴⁸ Saubala,⁶⁴⁹ Suparvaṇa, Trīṣaṅku,⁶⁵⁰ Ūrmimālīn, Vaśīṣṭha, Viśvāmītra, and Yājñavalkya.⁶⁵¹

Some of these and their opinions are referred to in the *Haṣṭyāyurveda*: Agniveśa (I.3.3 and IV.4),⁶⁵² Arimeda (III.8.301), Bāṣkali (III.8),⁶⁵³ Bharadvāja (IV.4), Gārgya (IV.4), Gautama (I.3.3; III.8.298; IV.4), Kāśyapa (II.8 and 11; III.8.28, 279, 295–296),⁶⁵⁴ rājaputra (= Bāṣkali; III.8.299),⁶⁵⁵ Vaśīṣṭha (II.1.1), and Yājñavalkya (III.8.273).⁶⁵⁶ The following sages are occasionally mentioned: Bhṛgu,⁶⁵⁷ Kāśyapa, Marīci,⁶⁵⁸ and Uddāla;⁶⁵⁹ Āṅgīras, Cyavana, Dīrgha, Jamadagni, Kratu, Paricāra, Pulaha,

Pulastya, and Vaśiṣṭha.⁶⁶⁰ Caraka is referred to once (II.58).

Pālakāpya is quoted or referred to in the *Agnipurāṇa*, Anantakumāra's *Yogaratanasamuccaya*, Ballālasena's *Adbhutasāgara*,⁶⁶¹ Basava's *Śivatattvaratnākara*, Bhoja's *Yuktikalpataru*, the anonymous *Gajaśāstra* and *Gajavaidya*, Godāvara's *Hariharacaturāṅga*,⁶⁶² Hemādri's *Caturvargacintāmaṇi*,⁶⁶³ Hemādri's *Lakṣaṇaparakāśa*,⁶⁶⁴ Jayaratna's *Jvaraparājaya*, Kṣīrasvāmin's commentary on the *Amarakośa*,⁶⁶⁵ Mallinātha's commentary on Kālidāsa's *Raghuvamśa*,⁶⁶⁶ Mitramiśra's *Vīramitrodaya*,⁶⁶⁷ Narahari's *Vāgbhaṭamanḍana*,⁶⁶⁸ Nilakaṇṭha's *Mātaṅgalīlā*, Niścalakara's commentary on the *Cakradatta*,⁶⁶⁹ Rāghavabhaṭṭa's commentary on Kālidāsa's *Abhijñānaśākuntala*,⁶⁷⁰ the *Śārṅgadharapaddhati*, Śivādāsasena's commentary on the *Cakradatta*, Śrīdāsapāṇḍita's commentary on the *Aṣṭāṅgaḥṛdayasaṃhitā*,⁶⁷¹ Ṭoḍara's *Āyurvedasaukhya*, Ugrāditya's *Kalyāṇakāraka*,⁶⁷² Umāpati's commentary on Nārada's *Gajaśikṣā*, and Vijayarakṣita's part of the *Madhukośa* on the *Mādhavanidāna*.

Pālakāpya's work is quoted as *Hastivaidyaka* in Cakrapāṇidatta's *Āyurvedadīpikā*, and as *Gajavaidyaka* in Vācaspati's commentary on the *Mādhavanidāna*.

A Hindī commentary on the *Hastyaśūdrveda*, called *Amarasubodhinī*, was written by Rākheṇā in the second half of the seventeenth century.⁶⁷³ A Kannaḍa commentary by Virabhadrarāja (about A.D. 1600) is also known.⁶⁷⁴

Six types of burns (dagdha) are distinguished: agni-, arka-, vidyud-, saṃtāpa-, kṣāra-, and viśadagdha (III.2). Wounds (sadyalḥkṣata) are of several types: chinna, vicchinna, nirviddha, sāvanaṣṭa, vidārīta, uttuṇḍita, atividhā, viddha, avamṛṣṭa, dagdha, and dūṣiṣṭakṣata (III.3.4–5ab).⁶⁷⁵ Seven kinds of surgical intervention are listed: chedya, bhedyā, lekhyā, visrāvāṇa, vidārāṇa, eṣāṇa, and sīvana (III.30).⁶⁷⁶ The names of surgical instruments are partly identical with those of the *Suśrutasaṃhitā*.⁶⁷⁷ Thirteen types of fracture are distinguished: niṣpiṣṭa, viśliṣṭa, prakṣipta, tiryakṣipta, atikṣipta, mukṭakāṇḍa, sthāpita, jarjaribhūta, cūrṇita, mathita, cyuta, majjānūjātamathita, and bhagna (III.32).⁶⁷⁸ The varieties of leeches are related to those of human medicine.⁶⁷⁹ The number of marṃs is one hundred and seven, as in human āyurveda.

A discussion on the problem which part of the embryo develops first is also found in Pālakāpya's work, without, however, mentioning names of authorities who held a particular opinion on this subject.⁶⁸⁰ The stages of embryonic development are described.⁶⁸¹

The six tastes are classified into three rasas (madhura, kaṭuka, amla) and three uparasas (tikta, kaṣāya, lavaṇa),⁶⁸² a feature not found in human āyurveda. The seven tissues (dhātu) are connected with seven sages: rasa with Ātreya, rakta with Vaśiṣṭha, māṃsa with Kāśyapa, medas with Gautama, asthi with Bharadvāja, majjā with Kauśika, and śukra with Jamadagni.⁶⁸³

The eight arigas of āyurveda are not referred to. The arrangement of the diseases is peculiar to this treatise. They are classified, in the same way as human diseases in the *Suśrutasaṃhitā*,⁶⁸⁴ into three broad categories: ādhyātmika, ādhibhautika and ādhidaivika (I.7). The *Hastyaśūdrveda* enumerates seventy-six diseases by vāta (I.7.7cd–17ab), twenty-seven by pitta (7.17cd–21), thirty-two by kapha (7.22–27ab), fifteen by rakta (7.27cd–30ab), twenty-two by saṃnipāta (7.30cd–33), fourteen by vāta and pitta

(7.34–36), sixteen by vāta and kapha (7.37–40a), seven by vāta and rakta (7.40b–41c), three by kapha and rakta (7.41d–42ab), three by pitta and kapha (7.42cd–43a), three by vāta, rakta and pitta (7.43b–d), three by kapha, rakta and vāta (7.44), one by pitta, rakta and kapha (7.45ab),⁶⁸⁵ six by bhūtas and vāta (7.45cd–46), and five which are of mental origin (7.47–48ab). These 233 diseases⁶⁸⁶ form the ādhyātmika category. The category called āgantuka⁶⁸⁷ comprises eighty-three diseases (7.49–61ab), which makes the total number into 316.⁶⁸⁸

The theoretical concepts regarding pathogenesis are mostly the same as in human āyurveda, but an exception forms the recognition of blood (rakta, śoṇita) as having the same or almost the same status as the three doṣas;⁶⁸⁹ consequently, the term saṃnipāta, in human āyurveda applied to the group of three doṣas, is repeatedly used to designate vāta, pitta, kapha and blood.⁶⁹⁰ Vāta is very important as a cause of diseases, and the various kinds of vāta are often referred to.⁶⁹¹ The nosological classifications sometimes agree, sometimes disagree with those of human āyurveda in the descriptions of diseases common to human beings and elephants. The disease called gulma is, for example, of five types in human beings and elephants,⁶⁹² but loss of appetite is of one type in elephants,⁶⁹³ whereas human beings are afflicted by five varieties of this disorder.

Magical and religious elements, including mantras, are conspicuously present in the verses on treatment.⁶⁹⁴ Allusions to mythology are also found.⁶⁹⁵

The therapeutical procedures are largely the same as those of human āyurveda. The same applies to the materia medica. The chapter on yavasa (fodder grasses; IV.8) mentions the names of many grasses that are only found in this treatise.

Pālākāpya is a legendary figure, described as the son of the sage Sāmagāyana and a female elephant which drank the sage's urine, mixed with his semen.⁶⁹⁶ The descriptions of Pālākāpya resemble those of Ātreya Punarvasu in the *Carakasamhitā*.⁶⁹⁷ Pālākāpya is sometimes regarded as an incarnation of Dhanvantari.⁶⁹⁸ His hermitage was situated on the banks of the river Lauhitya.⁶⁹⁹

The date of the *Hastyāyurveda* cannot be determined with any certainty. The quotations by Kṣīrasvāmin prove that some version of the work is earlier than the first half of the twelfth century. The terminus ante quem would be shifted to the end of the eighth century if the Gaṅga king Śivamāra, author of a *Gajāśṭaka*, was acquainted with the whole treatise.⁷⁰⁰ The *Hastyāyurveda* is later than the *Caraka*- and *Suśrutasaṃhitā*, because its structure betrays the influence of these classics.⁷⁰¹

PAŚUVAIDYA.⁷⁰²

PĪLUKĀCĀRYA.⁷⁰³

RAMACANDRA KAVI: *Aśvaśāstra*.⁷⁰⁴

RUDRADEVA: *Śyainikaśāstra*.⁷⁰⁵

The seven chapters (pariccheda) of this work in verse deal with the following subjects:⁷⁰⁶ the defence of vices (vyasana) (1: karmānuṣajjana; 30 verses); the eighteen vices (2: vyasanaheyāheyatā; 33 verses);⁷⁰⁷ various kinds of hunting (mṛgayā), the last of which is hawking (śyenapātā) (3: mṛgayāvivecana; 79 verses);⁷⁰⁸ various

kinds of hawks, their training and their capacity for hawking (4: śyenavivecana; 62 verses); the feeding and tending of hawks, and the treatment of their diseases (5: cikitsā; 79 verses);⁷⁰⁹ various kinds of sport with hawks (6: śyenapāṭetikartavyatā; 62 verses); after-enjoyments (7: mṛgayānantaretikartavyatā; 29 verses).⁷¹⁰

Some of the birds mentioned in the treatise are:⁷¹¹ aurāṅgaṇa (4.42), balākākṣa (4.34),⁷¹² bharadvāja (6.41), cakraṅga (4.35),⁷¹³ cakravāka (4.35),⁷¹⁴ caraka (4.20; 5.2; 6.39),⁷¹⁵ ceṭa (4.32; 5.7),⁷¹⁶ cūlāṅka (5.5), cūlikāṅka (4.48), dātyūha (6.37),⁷¹⁷ dhāvana (4.46), dhūti (4.32; 7.12),⁷¹⁸ dhūtikā (5.7; 6.29), haṃsavāja (4.37),⁷¹⁹ jūra (4.32),⁷²⁰ kālaka(vāja) (4.36),⁷²¹ kalaviṅka (4.16; 5.24, 49),⁷²² kaṅka (4.36; 6.37),⁷²³ kapota (4.16),⁷²⁴ kecuka (6.40), krauñca (6.35; 7.12), kuhī (4.3, 20, 54; 5.2; 6.24, 25, 35, 59; 7.12),⁷²⁵ lagara (4.20),⁷²⁶ jāva (6.32; 7.12), mahārāvāṇa(vāja) (4.39–40),⁷²⁷ mānika (4.48), pakṣakālikā (5.4),⁷²⁸ pakṣakalikā (4.21), pratiṣṭhāna (4.46), sārāsa (6.35), śaśāda (4.20; 5.3; 6.26),⁷²⁹ śicāna (4.32, 49; 5.6),⁷³⁰ śikāra (4.45; 6.57, 58), tittiri (6.58),⁷³¹ ṭonā (5.7; 6.29, 40),⁷³² ṭṛṇabharī (7.12),⁷³³ ṭunā (4.32),⁷³⁴ turumutī (4.21; 5.7),⁷³⁵ va-harī (4.20; 5.2; 6.24, 37),⁷³⁶ vāja (4.29, 31, 32, 33; 5.24; 6.44, 48),⁷³⁷ varāja (6.44), vartikā (5.48; 6.29),⁷³⁸ vāsa (4.3, 32; 5.5; 6.24, 25, 55),⁷³⁹ and vesara (4.32).⁷⁴⁰

Many words of Turkish or Persian origin are used in this work, which has been influenced by Muslim treatises on the subject.⁷⁴¹

The author, Rudra(candra)deva or Candradeva, was a king of Kūrmācala, i.e., Kumaon. He also wrote a work on dharmaśāstra, called *Traivarnīkadharmanirṇaya*.⁷⁴²

Since Rudradeva quotes Kullūkabhaṭṭa's commentary on the *Manusmṛti*, he must have lived after the middle of the fifteenth century.⁷⁴³

ŚĀLIBHADRA: *Aśvaśāstra*.⁷⁴⁴

ŚĀLIHOTRA: (1) *Aśvahṛdaya*,⁷⁴⁵ (2) *Aśvalakṣaṇaśāstra*,⁷⁴⁶ (3) *Aśvaprakāśaśāstra*,⁷⁴⁷ (4) *Aśvaśāntividhāna*,⁷⁴⁸ (5) *Aśvavaidya*,⁷⁴⁹ (6) *Aśvāyurveda*,⁷⁵⁰ (7) *Raivatastotra*,⁷⁵¹ (8) *Śālihotra*,⁷⁵² (9) *Śālihotronnaya*,⁷⁵³ (10) *Siddhayogasamgraha*.⁷⁵⁴

The *Aśvalakṣaṇaśāstra*, *Aśvavaidya*, *Aśvāyurveda*, and *Śālihotra* may well represent the same work or different versions of it.

The title *Śālihotra* is also given to treatises on the same subject by other authors,⁷⁵⁵ since Śālihotra's work was regarded as the basic one concerning *aśvaśāstra*.⁷⁵⁶

Authors and works quoting Śālihotra or referring to him are: *Agnipurāṇa*, Ananta-kumāra's *Yogaratanasamuccaya*, the anonymous commentator on Somadeva's *Nītivākyāṁṛta*,⁷⁵⁷ Ballālasena's *Adbhutasāgara*,⁷⁵⁸ Basava's *Śivatattvaratnākara*,⁷⁵⁹ Bhānuji Dīkṣita's commentary on the *Amarakoṣa*, *Bheṣajakalpa*, *Bheṣajakalpasārāsamgraha*, Bhoja's *Yuktikalpataru*, Candraṭa's *Yogaratanasamuccaya*, Dāmodara's *Arogyacintāmaṇi*, Dīpaṅkara's *Aśvavaidyaka*, Durlabhagaṇa's *Siddhohpadeśasamgraha*, *Garudapurāṇa*, Godāvara's *Hariharacaturāṅga*, Hemādri,⁷⁶⁰ Hemādri,⁷⁶¹ Indu,⁷⁶² Induse-na's *Sārāsamgraha*, Jayadatta's *Aśvavaidyaka*, Kalhaṇa's *Sārāsamuccaya*, *Mahābhārata*,⁷⁶³ *Matsyapurāṇa*,⁷⁶⁴ Mitrāmīśra's *Vīramitrodaya*,⁷⁶⁵ Nakula's *Aśvacikitsita* and *Aśvaśāstra*, Narahari's *Vāgbhaṭamaṇḍana*,⁷⁶⁶ Nārāyaṇa Vidyāvinoda's commentary on the *Amarakoṣa*,⁷⁶⁷ Nīśalākara's commentary on the *Cakradatta*,⁷⁶⁸ *Pañcatantra*,⁷⁶⁹ *Paraśurāmapratāpa*, Rāyamukūṭa's commentary on the *Amarakoṣa*, *Śāriṅga-*

dharapaddhati, Sarvānanda's commentary on the *Amarakoṣa*,⁷⁷⁰ Śivadāsa's commentaries on the *Carakasamhitā* and the *Cakradatta*, Sukhānanda's *Aśvaśāstra*, Tōḍara's *Ayurvedasaṅkhyā*, Vāhaṇa's *Aśvāyurveda*, Vallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*, and an anonymous *Yogaśatābhidhāna*. He is quoted as an authority on cows by Bhaṭṭotpala in his commentary on Varāhamihira's *Bṛhatsamhitā* (chapter 60).

The formula of Nārāyaṇa's *siddhārthakatai*, found in the Bower MS (III.36b–53), is said to derive from Śālihotra.⁷⁷¹

Śālihotra's treatise was translated into Tibetan by Śrībhadrā and Buddhaśrīśānti, assisted by the famous Rin-chen bzan-po,⁷⁷² as well as into Persian,⁷⁷³ Arabic,⁷⁷⁴ and Hindī.⁷⁷⁵ One of the Persian translations, the *Tarjamah-i-Sālotar-i-asbān*, was translated into English by *J. Earles (1788).⁷⁷⁶

Commentaries on Śālihotra's works were written by Ananta Bhaṭṭa⁷⁷⁷ and Rāmanātha Vaidya;⁷⁷⁸ an anonymous commentary is also recorded.⁷⁷⁹

The place of residence of Śālihotra is said to have been Śālātura,⁷⁸⁰ Śālīsūrpa,⁷⁸¹ or Śrāvastī.⁷⁸² He expounded the veterinary science in the forest of Campaka at the foot of the Himālaya.⁷⁸³

Śālihotra's works⁷⁸⁴ cannot be dated accurately, but they may be from or somewhat earlier than the tenth century.⁷⁸⁵ The Tibetan translation was made between A.D. 992 and 1042.⁷⁸⁶

ŚĀLIHOTRARAHASYA.⁷⁸⁷

ŚĀLIHOTRASĀRA.⁷⁸⁸

ŚĀLIHOTRASĀRASAMGRAHA.⁷⁸⁹

ŚĀLIHOTRAŚĀSTRA.⁷⁹⁰

ŚĀLIHOTRONNAYA.⁷⁹¹

ŚĀRṆGADHARA: *Śārṅgadhara-paddhati*.⁷⁹²

SĀYANA: *Subhāṣitasudhānīdhi*. This anthology contains chapters called Gajapaddhati and Aśvapaddhati.⁷⁹³

ŚIVARĀMABHŪPATI: *Kalpanāratna*.⁷⁹⁴

SOMADEVA: *Yāśastilaka*.⁷⁹⁵

SOMEŚVARA: *Mānasollāsa*.⁷⁹⁶ This work contains material of zoological interest: 4.997–1170ab (on cocks: *tāmracūda*- or *kukkūṭavinoda*), 1170cd–1328 (on *lāvakas*, i.e., a sort of quails: *lāvakayuddha*),⁷⁹⁷ 1239–1259 (on rams: *meṣavinoda*), 1260–1276 (on buffaloes: *mahiṣavinoda*), 1277–1297 (on pigeons: *pārāvatavinoda*), 1298–1328 (on dogs: *sārameyavinoda*),⁷⁹⁸ 1329–1380 (on falcons and falconry: *śyenavinoda*),⁷⁹⁹ 1381–1433ab (on fishes and angling: *matsyavinoda*),⁸⁰⁰ and 1433cd–1725 (on hunting: *mrgayāvinoda*).

The section on hunting⁸⁰¹ has been reproduced, with numerous proposals for corrections of the text, and together with a German paraphrase, by R. Krottenthaler.⁸⁰²

The introductory verses describe types of country unsuitable and suitable to hunt-

ing. The remaining part is devoted to a long series of types of hunting, such as, for example, hunting at watering places (pāṇīyajā mṛgayā), in fields (kṣetrajā), by means of decoys (dīpamṛgajā), snares (pāśajā), nets (jālajā), cheetahs (vyāghramokṣaṇasambhūtā), etc.

Some of the animals mentioned are: hariṇa, kṛṣṇasāra,⁸⁰³ kuraṅga, ruru,⁸⁰⁴ śambhara, sārāṅga, and sūkara.

The veterinary science is also dealt with: 2.172–331 is concerned with elephants, 2.573–619 with horses, and 2.620–677 with elephants again; 4.205–661ab (gajavāhyāvalīvinoda) and 4.661cd–827 (vāji- or turagavāhyāvalīvinoda) are also about elephants and horses.

Someśvara distinguishes sixty-five breeds of horses, of which thirty-nine are mentioned by name; the names of the remaining twenty-six types are not given because they are said to have become unknown in the Kaliyuga (4.669–675).⁸⁰⁵ The āvartas (whirls of hair) are the same as in Nakula's *Aśvaśāstra* (4.676–678), apart from three special ones.⁸⁰⁶ Horses of more than one colour are said to be of sixteen types (4.684–701).⁸⁰⁷ The charactertypes (sattva) of horses differ somewhat from those in the works of Jayadatta and Nakula (4.702–703).⁸⁰⁸ Three varieties of sheen (chāyā) are distinguished (4.704–705).⁸⁰⁹ Someśvara describes the line of treatment for some diseases which are peculiar to horses: subhikṣāvarta (2.581),⁸¹⁰ simhāṇaka (2.579),⁸¹¹ rasājīrṇa (2.603),⁸¹² and cālī (2.608–609).⁸¹³

Elephants of good qualities are said to be found in eight forests, named and described by Someśvara (2.172–179).⁸¹⁴ The typology of elephants is more elaborate than in other treatises (4.230–235).⁸¹⁵ Their characteristics are described on the basis of their anūka (size), aṁśaka, sattva, and kula (2.221). Seven types are distinguished as to size (2.222–225), nine with regard to aṁśaka (2.234–262),⁸¹⁶ three chief (sāttvika, rājasa, tāmasa) and nine secondary types with regard to sattva (2.263–272), and eight types with regard to kula or anvaya (2.274–281).⁸¹⁷ The various means of capturing (bandha) wild elephants (2.180–220)⁸¹⁸ and their training (śikṣā; 2.282–331) are dealt with by Someśvara. Causes of diseases in elephants are bandhana (capturing), tāḍana (beating), vyādhi, vanasaukhyavicintana (thinking about the pleasures of the forest), asātmya, ajīrṇa, āyāsa (strain), and jāgarāṇa (waking) (2.628–629). Someśvara enumerates the names of fever in various living beings and inanimate substances (2.639–643).

The nosology resembles that of human āyurveda in being dominated by the tridoṣa doctrine.

A syndrome peculiar to elephants is called mṛddohada (craving after mud; 2.659).⁸¹⁹

ŚRĪPURUṢA: *Gajāśāstra*.⁸²⁰

SUHOTRA: *Hayadīpa*.⁸²¹

SUKHĀNANDA: *Aśvaśāstra*.⁸²²

ŚUKRANĪTĪ.⁸²³

ŚYENACIKITSĀ.⁸²⁴

TURAṆGAPRABANDHA.⁸²⁵

TURANĠARAṆGA.⁸²⁶

VAHAḌA, VĀHAḌA, VAHĀḌA, VĀHĀḌA:⁸²⁷ *Aśvacikitsāsāra*,⁸²⁸ *Aśvāyurveda*,⁸²⁹ *Aśvāyurvedasārasaṃgraha*,⁸³⁰ or *Śālihotra*.⁸³¹

This work⁸³² consists of four sections (adhikāra): samunnati (chapters 1–37), on the nature of horses and their characteristics; rahasya (chapters 38–72), on the care for and the feeding of horses, and on general therapeutic measures; rasāyana (chapters 73–86), on various rasāyanas; cikitsā (chapters 87–277), on the treatment of diseases.

Section one deals with anatomy, the āvartas, puṇḍras and puṣpas, the colours of horses, their age, smell, sattva, chāyā, etc. Section two describes therapeutic measures such as sneha, sveda, abhyaṅga, dhūmapāna, nirūha, śīrāveda (bloodletting, etc.) Section three consists of a collection of kalpas. Section four enumerates more than 180 diseases, many of which cannot easily be identified.

Some noteworthy names of diseases are:⁸³³ ruksāvarja (92), śṛṅgavarta (94), kora-doṣa (98),⁸³⁴ snehavarta (99),⁸³⁵ vivartana (100),⁸³⁶ vartātisāra (101),⁸³⁷ ūrdhvavarta (103),⁸³⁸ viṣaṇḍhavarta (104),⁸³⁹ ādhmānavarta (105),⁸⁴⁰ siṅghanaka (106),⁸⁴¹ ekapu-ṭa (112), kaphoṣṭa (114),⁸⁴² gallaka (117), vālukī (118),⁸⁴³ āvāntaka (119), jīṭkā-stambha (120),⁸⁴⁴ saṃprambhajvara (137), abhitāpajvara (138), bodha (140), urastāpa (146), praskanna (147),⁸⁴⁵ anuskanna (148),⁸⁴⁶ liṅgita (149), vātabalā (150),⁸⁴⁷ ama-ṇḍaka (151),⁸⁴⁸ alūkapāda and māṃsacchedalaṅgita (152),⁸⁴⁹ abhigātalaṅgita (153), vidārī (154),⁸⁵⁰ kaṇḍarālaṅgita (155), upajaṅghā (156),⁸⁵¹ śronīpatī (158),⁸⁵² daṃ-śapitta (164),⁸⁵³ koṣṭarājī (166),⁸⁵⁴ vartinī (168),⁸⁵⁵ kacchapa (169),⁸⁵⁶ ekāṅgaroga (171),⁸⁵⁷ droṇikā (172 and 173),⁸⁵⁸ vālāda (174),⁸⁵⁹ unitaroga (180),⁸⁶⁰ phalaskanna (181),⁸⁶¹ aṇḍacālī (182),⁸⁶² raktāṇḍa (183), pittāṇḍa (184), kaphāṇḍa (185),⁸⁶³ pu-cchāṇḍa (186),⁸⁶⁴ āsru-pāta (191),⁸⁶⁵ utkarṇa (206), prṣṭhastambha (207),⁸⁶⁶ ka-potaniṣāda (208), mṛgajoga (209), mṛgajṛmbhita (210), bhārābhikhiṇna (212),⁸⁶⁷ yoktrābhigāta (213),⁸⁶⁸ vyānaka (214),⁸⁶⁹ nīraṇjaka (215),⁸⁷⁰ vidhuragraha (216),⁸⁷¹ balamattapānamatta (217), rātrihita (219),⁸⁷² prāvāraka (220),⁸⁷³ pranunna (221),⁸⁷⁴ budbuda (223),⁸⁷⁵ paridhāvaci (226),⁸⁷⁶ sūcyandhā (227),⁸⁷⁷ nāyaprekṣi (228),⁸⁷⁸ muñja (230),⁸⁷⁹ muñjajāla (231),⁸⁸⁰ añjalikārika (233),⁸⁸¹ udakagraha (235),⁸⁸² varuṇagraha (236), gardabhaka (249), kaṇṭhaśālūka (251), uroghāta (253), vislutāṇḍa (256), rājī (259),⁸⁸³ kṣudhātāṅka (264), durmanas (265), saṃcatakī (266), ḍagraha (270), jikāstambha (271),⁸⁸⁴ possession by pūtanāsa (273), and nyāsa (274).

Vāhāḍa refers to Śālihotra.

Vāhāḍa was a son of Vikrama.⁸⁸⁵

Vāhāḍa's work is earlier than A.D. 1000 according to P.K. Gode; his conclusion is based on the fact that it does not describe the pārasika, tājika and turuṣka breeds of horses, which are mentioned as the best breeds by Jayadatta, Nakula and Someśvara.⁸⁸⁶ A.-M. Blondeau dates the work to the period A.D. 700–1000; she is convinced that Vāhāḍa's work is earlier than the Sanskrit version of Śālihotra's *Aśvāyurveda*.⁸⁸⁷

VAIŚAMPĀYANA: (1) *Aśvāyurvedasārasinḍhu*,⁸⁸⁸ (2) *Gajaśāstra*.⁸⁸⁹

The edition of Nakula's *Aśvaśāstra* contains the chapter called manahsattvaviñjāna of the *Sārasinḍhu*, also called *Śālihotravaiśampāyanīya*.⁸⁹⁰ The *Vaiśampāyanīya*

is quoted in the anonymous *Gajaśāstra*. Vaiśampāyana is referred to in Basava's *Śivatattvaratnākara* (7.2.207).

VĀJIRAHASYAŚATAKA.⁸⁹¹

VĀJISYENALAKṢAṆA.⁸⁹²

VĀJISYENAPARĪKṢĀ.⁸⁹³

VĀJISYENAŚĀLIHOTRA.⁸⁹⁴

VARĀHA: *Śālihotra*.⁸⁹⁵

VARĀHAMIHRA: *Brhatsaṃhitā*.⁸⁹⁶

VARDHAMĀNA: *Yogamañjarī*.⁸⁹⁷

VEDAVYĀSA: *Gajalakṣaṇacikitsā*.⁸⁹⁸

VIDYĀNĀTHA: *Anūparatnākara*.⁸⁹⁹

VĪRASOMA: *Hastivaidyaka*.⁹⁰⁰

VĪRAVIKRAMADEVA MAHĀRĀJA: *Aśvaśāstra*.⁹⁰¹

VIṢṆUDĀSA: (1) *Aśvadarpaṇa*; ⁹⁰² (2) *Aśvalakṣaṇa*.⁹⁰³

VIṢṆUDHARMOTTARAPURĀṆA. Three chapters of this work deal with veterinary subjects: *gocikitsāvarṇana* (II.43), *aśvacikitsā* (II.46), and *hastikikitsā* (II.49).

YOGARĀJA: *Aśvaphalaprakāśa*.⁹⁰⁴

Part 10

Works on rasaśāstra and ratnaśāstra

Chapter 1

Ānandakanda

The *Ānandakanda*¹ is a very elaborate text on alchemy in the form of a conversation between Bhairava² and Bhairavī.³

Contents⁴

The treatise consists of about 6,900 verses, arranged in two sections (amṛtikaraṇaviśrānti and kriyākaraṇaviśrānti), which are divided into twenty-six and ten chapters (ullāsa) respectively, followed by two additional chapters (pariśiṣṭa).

The amṛtikaraṇaviśrānti deals with the processing of mercury, the kriyākaraṇaviśrānti with the processing of metals, minerals, gems, etc.

The subjects of chapter one of section one (61 1/2 verses) are: introduction (1–8ab), the origin of mercury and its varieties (1.8cd–27ab), the names of mercury and their etymology (27cd–34ab), generalities on the doṣas of mercury (34cd–38ab), the five avasthās (38cd–39ab), the five gatis (39cd–42ab), the doṣas and their effects on the human system (39cd–53ab), and a ritual (53cd–62ab).

Chapter two (270 verses) deals with the teacher and his pupil (2–10ab),⁵ the kākīnī and a substitute for her (10cd–21), the rasaśālā (22–37ab), rituals to be performed (37cd–199ab), a eulogy of mercury (199cd–221ab), and a stotra addressed to mercury (221cd–270).

Chapter three (125 verses) is about the initiation ritual (dīkṣā).

Chapter four (518 verses) lists the saṃskāras (1–6) and describes these operations: svedana (11–24ab), mardana (24cd–29ab), mūrchā (29cd–35ab), utthāpana (35cd–36), the three types of pātana (37–53ab), nirodhana (53cd–57), niyāmana (58–60ab), dīpana (60cd–65ab), anuvāsana (65cd–66), cāraṇa (69cd–170ab), jāraṇā (170cd–391), garbhadruti (392–422ab), bāhyadruti (422cd–435), rañjana or rāga (436–469), the three types of sāraṇā (470–489), vedha (490–509), and krāmaṇa (510–518).

Two types of cāraṇa are described, samukha- and nirmukhacāraṇa, four varieties of mukhīkaraṇa (71–96ab), and twelve ways to achieve abhrakacāraṇa (98–149).

Other subjects of chapter four are the preparation of abhrakasattva (174–187; five methods), dvandvamelāpana (188–243ab), bījas (243cd–328), biḍas (329–359), the druti of mica, gold and gems (423cd–429), drutimelāpana (429cd–435), rañjanataila (437–440), and sāraṇataila (480–489).

Chapter five (86 1/2 verses) is concerned with bhūcarī jāraṇā (2–9),⁶ khecarī jāraṇā (10–16ab),⁷ another type of jāraṇā (16cd–20),⁸ jāraṇā again (21–33ab),⁹ the jāraṇā of gems (33cd–45),¹⁰ dhūmavedhirasa (46–52),¹¹ some methods to achieve vedha (53–

62),¹² grades of vedha dependent on the amount of grāsa assimilated (jīrṇa) by mercury (63–71),¹³ the properties of mercury when it has assimilated a sixfold amount of abhraka (72–75ab), the order in which mercury should be made to digest and assimilate other substances, the amount of grāsa to be added, the effects of the addition of each grāsa (75cd–83ab),¹⁴ and, finally, the general effects of each of the saṃskāras (83cd–87ab).

Chapter six (129½ verses) is about dehavedha, i.e., the transformation of the body. Its subjects are: the preparatory purification of the body by means of pañcakarma (4–18ab), other purificatory measures (18cd–30), āroṭarasa and its uses (31–39), kṣoṭabaddharasa and the way to use it (40–85ab), dietary and behavioural rules (85cd–106ab), rasājīrṇa and its treatment (106cd–114ab), and vedha of the seven dhātus of the body (114cd–130ab).

Chapter seven (188½ verses) deals with the origin of the gems (1–5); diamonds (vajra), their varieties, characteristics and uses (6–14), their purification (15–19), vajrabhasman as a rasāyana (20–35ab), vajraudana (35cd–39), the liquefaction (druti) of diamonds (40–42ab) and other gems (42cd–44), and the properties of vajrabhasman (45–49ab); gold, its varieties, purification, bhasman, its use as a rasāyana, its liquefaction (49cd–82); kānta(loha), its origin and varieties (83–96), the extraction of its essence (sattvapātana; 97–104), its properties and purification (105–111ab), mantras to be employed (111cd–115), the preparation of the bhasman, its amṛtikaraṇa, pāka, and uses as a rasāyana (116–139ab),¹⁵ the liquefaction of kānta (139cd–140ab); the four types of iron (kiṭṭa, muṇḍa, tīkṣṇa, kānta) and the superiority of kānta for alchemical purposes (140cd–143ab); mica (abhraka), its origin, four varieties, the superiority of the variety called vajra, the preparation of dhānyābhraka (143cd–164), the extraction of abhrakasattva (165–168),¹⁶ the bhasman of the sattva (169–174), the uses of the sattva (175–183ab), the liquefaction of the sattva (183cd–185ab), and the properties of mica (185cd–189ab).

Chapter eight (22 verses) gives an account of rasāyana and the order in which various preparations should be used.

Chapter nine (196 verses) deals with the preparation of rasāyanas.

Chapter ten (140 verses) is about fifteen different ghuṭikās (15cd–102ab), plants and other drugs employed in krāmaṇa (1102cd–107), the effects of the pills (ghuṭikā) described (1108–140ab), and a mantra (140cd).

Chapter eleven (42 verses) describes bhūtakālāntakarasa.¹⁷

Chapter twelve (200 verses) is devoted to the mountain Śrīśaila (= Śrīparvata) and the numerous holy places there, where siddhis can be acquired; the chapter ends with mantras.

Chapter thirteen (38 verses) is concerned with sulphur (gandhaka), its origin, four varieties, purification, and uses as a rasāyana.

Chapter fourteen (47 verses) deals with poisons, their origin (12–12), varieties (13–25), purification (26–27), uses as a rasāyana (28–31), and the disorders caused by poisons, followed by the treatment of these disorders (31–47).

Chapter fifteen (634 verses) describes kalpas of thirty-eight divine herbs (divyauṣadhi).

Chapter sixteen (127 verses) is about the following subjects: ankolakalpa (11–13),¹⁸ other rasāyanakalpas (14–25), mahākāmeśvarakalpa (26–33), mixtures of organic and inorganic substances (34–37), mahānīlītaila (38–43ab), candanādyataila (43cd–51ab), a rasāyana used in massage (udvartana; 51cd–60), kalpas used in blackening the hair (keśarañjana; 61–109ab), and rules for the digging up of divyauśadhis (109cd–127).

Chapter seventeen (94½ verses) is about the drinking of water in the early morning (uṣaḥpāna) as a rasāyana.¹⁹

Chapter eighteen (476 verses) discusses the daily regimen (dinacaryā, 1–381; rātricaryā, 382–476), chapter nineteen (21 verses) the regimen during the seasons (1–183ab); chapter nineteen includes descriptions of the digestive process and metabolism (183cd–204); it ends with verses on the digestive fire (205–219ab).

Chapter twenty (196 verses) is devoted to jīvanmuktī, the means to attain this state, and yoga.

Chapter twenty-one (110 verses) describes the construction of the hut (kuṭī) used for rasāyana, the procedure itself, and its results.

Chapter twenty-two (88 verses) describes vandāka, several kinds of this plant, and vandākakalpas.²⁰

Chapter twenty-three (749½ verses) deals with the purification (śodhana) of mercury (13–34; seven methods), vaḍavānalabīḍa (35–43ab), the preparation of mercurial ashes (pāradabhasman; 43cd–127: thirty-one methods), the preparation of gandhapiṣṭī (129–149ab; six methods), piṣṭīstambhana (149cd–154ab), piṣṭījāraṇa (154cd–158ab), piṣṭīmāraṇa (158cd–164ab), bandhas of mercury (164cd–211: vaikrānta-, gandhaka-, gandhakasvarṇa-, mūlikābandha), mūrchanā (212–241; nine methods), kalpas resulting in the bandha of mercury (242–408: mūlikābandha), kartarīrasabandha (409–417ab), a number of udakabandhas (417cd–527ab), some ghuṭikās (527cd–557), some rasāyanakalpas (558–584ab), baddhajāraṇā (584cd–586), three types of bandha: mūla-, sāra- and pākabandha (587–593ab), drutibandha (593cd–597ab), drutimelana (597cd–599), types of vajrabandha (600–648ab), bandhas suitable to attain vedha (648cd–727ab), vajrahemadvandvamelāpāna (727cd–742ab), and ratnadrutibandha (742cd–750ab).

Chapter twenty-four (207 verses) is devoted to the bandha of mercury by means of mahārasas, uparasas and lohas.²¹ Its subjects are: vaikrāntabandha (22–37; ten methods), kāntabandha (38–41ab), capalabandha (41cd–54ab; three methods), gandhakabandha (54cd–95; eight methods), tālakabandha (96–102ab), several types of laghubandha (102cd–154ab), nigalabandha (154cd–178), mūrchanā (179–189ab), and jalūkābandha (190cd–208ab).

Chapter twenty-five (114 verses) gives definitions of technical terms (paribhāṣā).²²

Chapter twenty-six (244 verses)²³ gives an account of the yantras (1–148ab), mūṣās (148cd–186ab), koṣṭhīs (210cd–214), puṭas (218cd–237), and some related subjects.

Chapter one of the kriyākaraṇaviśrānti (363 verses) is devoted to the uparasas. It begins with lists of the uparasas (4–9ab), lohas (9cd–10), ratnas (11) and uparatnas (12–13cd).

Subjects dealt with in this chapter are: gandhaka (sulphur; 13cd–47); haritāla (48–73ab); manāḥṣilā (73cd–88); mākṣika (89–140); abhraka (mica; 141–180ab);²⁴ hiṅgula (cinnabar; 180cd–190); gairika (191–194ab); capala (194cd–204ab); śilājatu (204cd–215); bhūnāga (216–228ab); haridrāśman (228cd–229ab); agnījāra (229cd–234); rasaka (235–243); mayūratuttha (244–251ab); kaṅkuṣṭha (251cd–252); girisindūra (253–254); ṭaṅkaṇa (255–257ab); kampilaka (257cd–258); vatsanābha (259–261); kāsīsa (262–265); gaurīpāṣāṇaka (266); tuvarikā (267–268); podārāśṅgi-ka²⁵ (269–270); sindūra (271–273); rasāñjana, nīlāñjana, sauvīrāñjana and srotoñjana (274–286); aphenā²⁶ (287–292); puṣpāñjana (293–294); śaṅkha and kṣudraśaṅkha (295–298ab); śukti (298cd–300); jalāśukti (301–302ab); kaparda (302cd–308ab); sābunī (308cd–310ab); navasāra (310cd–312ab); saurāṣṭrī (312cd–313ab); ākhu-pāṣāna (313cd–315ab); sarjaraśa (315cd–318ab); guggulu (318cd–324); yavakṣāra (325–326); sarjika (327–328ab); lavaṇakṣāra (328cd–330ab); vajrakakṣāra (330cd–332ab); sāmudralavaṇa, saindhava, kācalavaṇa, biḍa, and sauvarcala (332cd–343); amlavetasa (344–347); kāca (348); chagaṇa (349–350ab); aṅgāra (350cd–351ab); sikatā (351cd–352ab). The chapter ends with verses on the purification of the uparasas (352cd–363).

Chapter two (48½ verses) is devoted to gold, its names, varieties, purification, the preparation of its bhasman, and its properties. Silver and copper are dealt with in the same way in chapters three (33 verses) and four (60 verses).

Chapter five (81½ verses) is about iron, its origin and three types (1–6), kāntaloḥa, its names and properties (7–17ab), purification (17cd–28ab), the preparation of its bhasman (28cd–61ab; nine methods), the amṛṭikaraṇa of the bhasman (61cd–66ab), lohapaṅka (66cd–68ab), the examination of the bhasman and its properties (68cd–82ab).²⁷

Chapter six (37½ verses) deals in the same way with tin (1–16ab) and lead (16cd–38ab).

Chapter seven (111½ verses) deals with pittala (brass; 1–11ab); kāṁśya (bronze; 11cd–18ab); vartaloḥa²⁸ (18cd–24ab); alloys (24cd–28); abhrakasattva,²⁹ its four varieties (29–30ab), the extraction of abhrakasattva (30cd–34ab), the varieties called kaṭhina, mṛdu and bīja (34cd–60ab), the purification (nirmalīkaraṇa) of abhrakasattva (60cd–65), the preparation of abhrakasattvasindūra (66–86ab; four methods), sthālīpāka (86cd–89), the amṛṭikaraṇa of lohābhasman (90–92), the properties of abhrakasattvasindūra (93–99); maṇḍūra (100–106ab); the quantities of a series of substances to be used in the purification and māraṇa of mercury, metals, etc. (106cd–112ab).

Chapter eight (218 verses) gives an account of the ratnas (1–166ab) and uparatnas (166cd–218). Its subjects are: māṇikya (4–15ab); muktā (15cd–21); pravāla (22–30); marakata (31–40); puṣparāga (41–46); vajra,³⁰ its names, the places where it is found, its varieties, qualities and blemishes (47–57ab), purification (57cd–66), the killing of its varieties (67–76ab) and of vajra in general (76cd–115; fourteen methods), its mṛdūkaraṇa (116–131; six methods), drutī (132–136ab), and properties (136cd–139ab); nīla (139cd–149ab); gomeda (149cd–155ab); vaidūrya (155cd–164); the group of five ratnas and the group of nine ratnas (164cd–166ab); sūryakānta (166cd–171); candrakānta (172–174); sphāṭika (175–176ab); vaikrānta (176cd–193); rājāvarta (194–204ab);

sasyaka (204cd–208); vimāla (209–217); peroja (218).

Chapter nine (110 verses) discusses in its introductory verses the herbs used in alchemical operations (the kulauṣadhis), which are to be distinguished from those useless for this purpose (the tṛṇauṣadhis). The kulauṣadhis are divided into four groups: rasauṣadhis, mahaṣadhis, siddhaṣadhis and divyauṣadhis (1–19ab). The divyauṣadhis belong to six groups, called vṛkṣa, vallī, latā, gulma, tṛṇa and vandānika (18). Chapter nine describes the sixty-four divyauṣadhis (19cd–97) and ends with an enumeration of these plants (98–111).

Chapter ten (235 verses) describes eighty-eight mahaṣadhis (1–224) and ends with an enumeration of these plants (225–235).

The two pariśiṣṭa chapters (paribhāṣā: 121 verses; prakīrṇaka: 163 1/2 verses) consist of quotations from the *Abhidhānakāmadhenu*, *Ajīṛṇamañjarī*, *Devīyāmala*, *Rasadarpaṇa*, *Rasakāmadhenu*, *Rasamañjarī*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasāmava*, *Rasasāra*, *Rasāvatāra*, *Rasendracūḍamaṇi* and *Śaktyavatāra*.

The Ānandakanda is quoted in the commentary on the *Aṣṭamahāmātrā*, Guḥrā-jārmamiśra's commentary on the *Āyurvedaprakāśa* (ad 1.363), Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and the *Rasatattvavivecana*.³¹

Special features³²

The five avasthās of mercury are: dhūma, cīṭiṭi, maṇḍūkapluti, sakampa and vikampa (I.1.38cd–39ab).³³ The five gatis are: jalavadgati, dhūmagati, haṃsavadgati, kiṭṭanibhā gatīḥ, and jīvavadgati (I.1.39cd–42ab).³⁴ The fourteen naisargikadoṣas are: pāṛthiva or bhauma, āpya, āgneya, ānila or vāyavya, nābhasa, gajacarmākhyā or gajatvac, puṇḍarīka, viśarpa, hāridra, raktacarmākhyā, nāraṅga, raktabinduka or raktabīja, asahyāgni, and maṇḍūkā (I.1.42cd–44ab).³⁵ The seven kañcukas or aupādhikadoṣas are: kālikā, malinī, kapotī, raktakañcukā, salomī, girijā, and piṅgalī (I.1.44cd–45).³⁶ The three yaugikadoṣas are: viṣa, nāga and vaṅga (I.1.46ab).³⁷ Each of the twenty-four doṣas is associated with a particular disorder (I.1.46cd–53ab).

The worship of Rasabhairava and Rasāṅkuśī are important topics of chapter two. Numerous other deities are mentioned, among whom are the ten Dūtīs (I.2.122–123),³⁸ the eight Vidyēśvaras (I.2.127), the seven Mothers (I.2.163),³⁹ the Yoginīs,⁴⁰ Śaktis, Kubjikā (I.2.164–165), etc. Mantras are frequently mentioned. Bhūtaśuddhi is elaborately described (2.97–194ab). The verses on rasasandhyā (I.2.40–62) are peculiar to the *Ānandakanda*.⁴¹

Chapter three discusses five types of dīkṣā: samayā- (I.3.9–56), sādha- (I.3.57–70), nirvāṇa- (I.3.71–81), ācārya- (I.3.82–96), and siddhadīkṣā (I.3.97–109).⁴² The verses on the samayādīkṣā enumerate the nine Nāthas⁴³ and the sixteen Siddhas. The names of the nine Nāthas are: Ādinātha,⁴⁴ Mīnanātha,⁴⁵ Gorakṣa,⁴⁶ Koṅkaṇēśvara,⁴⁷ Jālandhreśa,⁴⁸ Kandhanīśa,⁴⁹ Oḍḍīśa, Cīñcīnīśvara,⁵⁰ and Caurāṅgi⁵¹ (I.3.47–48ab). The sixteen Siddhas⁵² are: Caurāṅgi,⁵³ Carpaṭi,⁵⁴ Ghoḍācūli,⁵⁵ the two Rāmas,⁵⁶ Bholagovinda, Vyāḍi,⁵⁷ Nāgārjuna,⁵⁸ Korāṇḍa,⁵⁹ Śūrpakarma,⁶⁰ Muktāyī, Revaṇa,⁶¹ Kukkuraṇḍa,⁶² Śūrpapāda, Kaṇaurika,⁶³ and Kiṅkiṇika (I.3.48cd–50).

The list of the eighteen *saṃskāras* at the beginning of chapter four (I.4.1–6) omits *grāsapramāṇa*, *krāmaṇa* and *sevā*; *anuvāsana* is a *saṃskāra*; the three types of *sāraṇā* are regarded as three distinct *saṃskāras*.

Divine plants (*divyamūlikā*), employed in the *cāraṇa* of mica (*abhakra*) are: *agnidhamanī*, *bṛhatī*, *ciñcikā*, *haṃsapādī*, *indravāruṇī*, *karkotī*, *khaṇḍajārī*, *kumārī*, *lāṅgikā*, *maṇḍūkī*, *puikhā*, *rambhā*, *śaikhapuṣpī*, *sarpākṣī*, *vajrī*, and *vyāghrapādikā* (I.4.154cd–156). Four *bījas* are said to be important: *hema-*, *tāra-*, *nāga-* and *vaṅgabīja* (I.4.250cd–254ab); a fifth type described is *tāmraḥṭīja* (I.4.318cd–320).

Sixteen different *biḍas* are described (I.4.330–359). *Anusāraṇā* and *pratisāraṇā* are described as simple repetitions (once, respectively twice) of the operation called *sāraṇā* (I.4.489). Types of *vedha* are not distinguished in chapter four.

Some purificatory measures, to be taken before the ingestion of mercurial preparations, are said to remove the *lavaṇa-*, *kṣāra-* and *amladoṣa* from the adept's body (I.6.18cd–23ab).⁶⁴

Diamonds and their processing are dealt with in chapter seven (I.7.1–49ab), separately from the other gems. Three types of gold are distinguished: *rasavedhaja* (gold made by means of transmutation), *kṣetrasaṃbhava* (naturally occurring gold) and *lohasaṃkarakaja* (products resembling gold) (I.7.50–52ab). Five varieties of *kāntaloḥa* are described: *bhrāmaka*, *cumbaka*, *karṣaka*, *dṛāvaka* and *romaka* (I.7.87–96).⁶⁵

The names of the pills (*ghuṭikā*) described in chapter ten⁶⁶ are: *mṛtasamjīvanī*, *divyā*, *kāmeśvarī*, *hemasundarī*, *madanasundarī*, *khecārī*, *vajreśvarī*, *mahāvajreśvarī*, *vajrakhecārī*, *kālavidhvaṃsinī*, *gaganeśvarī*, *vajraghaṇṭeśvarī*, *vajrabhairavī*, *tripurabhairavī*, and *mahābhairavī*.⁶⁷

Place-names, names of deities, etc., occurring in chapter twelve, are: *Acaleśvara* (169), *Acchatailagiri* (148), *Alampura* (75; 77), *Amareśvara* (170), *Āvartaka* (46), *Bhīmapāduka* (75), *Bhṛgupātana* (145), *Brahmeśvara* (68), *Caṇḍikā* (71), *Candragupta-prākāra* (150), *Chedikīdvāraka* (138), *Dādhikavātaka* (148), *Dakṣiṇā* (141), *Devahraḍa* (155), *Doṅgalikā* (190), *Durgā* (69), *Gaṇādhipa* (123), *Ghaṇṭāsiddheśvara* (8; 11), *Guṇḍiprabhā* (159), *Hastisilā* (52), *Hastisiras* (52), *Ileśvara* (168), *Īśāna* (126), *Kadambeśvaradeva* (133), *Kākalārī* (192), *Kālakaṇṭheśa* (163), *Kapoteśa* (137), *Kapoteśvara* (141), *Kokilābila* (34), *Koṭīśvara* (168), *Kṣetrapālaka* (121), *Kuṇḍaleśvara* (48), *Liṅgādri* (182), *Mahānanda* (162), *Maheśvara* (80), *Maṇipallī* (29), a *yakṣiṇī* called *Mohalī* (104), an elephant called *Mohana* (152), *Nīlavanī* (157), *Padmāvatībila* (127), *Paṭahakarṇeśvara* (175), *Piṇḍikā* (184), *Puruṣeśvaradeva* (49), *Puṣpagiri* (137), *Rāmeśvara* (45), *Sarveśvara* (189), *Sparśaśilā* (151), *Śrīmālinīśvara* (165), *Śrīmālikārjuna* (8), *Sureśvara* (43), *Svargapurinātha* (39), *Svarṇaśilā* (170), *Tambūpura* (161), *Tripurāntaka* (22), *Umāparvata* (165), *Vajreśvara* (43), and *Yogīśvarī* (77).⁶⁸

Chapter fourteen describes ten poisonous substances of vegetable origin that are unsuitable for *rasāyana* purposes: *kālākūṭa*, *dardura*, *hālāhala*, *meṣaśṛṅga*, *mohada*, *granthi*, *karkatā*, *raktaśṛṅgi*, *haridra*, and *kesara* (I.14.13–14); the eight suitable poisons are: *śvetaśṛṅgi*, *vatsanābha*, *saṛṣapa*, *śṛṅgi*, *vāluka*, *mustaka*, *saktuka*, and *kardama* (I.14.15–16ab). The eight stages (*vega*) of intoxication are dealt with (I.14.33–35ab).

The *kalpas* described in chapter fifteen are called after the following thirty-eight *divyauṣadhis*: *brahmavṛkṣa* (3cd–51),⁶⁹ *śvetabrahmavṛkṣa* (52–60ab),⁷⁰ *muṇḍī*

(60cd–70ab),⁷¹ devadālī (70cd–91),⁷² śvetārka (92–97ab),⁷³ hastikarṇī (palāśa) (97cd–101),⁷⁴ rudantī (102–111ab),⁷⁵ nirguṇḍī (111cd–130),⁷⁶ śunakaśālmālī (131–138ab),⁷⁷ pathyā (138cd–156ab),⁷⁸ āmalakī (156cd–162ab),⁷⁹ triphalā (162cd–177ab),⁸⁰ śuṇṭhī (177cd–181),⁸¹ pippalī (182–191ab),⁸² citraka (191cd–201),⁸³ bhallātakī (202–205ab),⁸⁴ bhṛṅgarājā (219–227),⁸⁵ kumārī (228–245ab),⁸⁶ mahānīlī (245cd–253ab),⁸⁷ musalī (253cd–257),⁸⁸ indravallī (258–263ab),⁸⁹ jyotirdruma (263cd–264),⁹⁰ aśvagandhā (265–266ab),⁹¹ jyotiṣmatī (266cd–304),⁹² guggulu (305–312),⁹³ vijayā (313–499),⁹⁴ kañcukī (500–510),⁹⁵ kukkuṭī (511–522ab),⁹⁶ somalatā (522cd–579ab),⁹⁷ guḍūci (579cd–587),⁹⁸ tuvaraka (588–596),⁹⁹ somarājī (597–599ab),¹⁰⁰ vṛddhadāruka (599cd–620),¹⁰¹ vajravallī (621–623ab),¹⁰² tilakṣīrīṇikā (623cd–627), and brāhmī (628–634).

The elaborate description of uṣaḥpāna in chapter seventeen is a remarkable feature of the *Ānandakanda*; the sniffing up of water through the nose (nāsāpāna) is also dealt with (17.93cd–95ab).

Chapter twenty describes the ten main nāḍīs (62–64) and the ten kinds of vāyu (65–69), Kuṇḍalinī (73–82ab), mudrās and bandhas (82cd–108ab), together with other subjects known from Tantric works and treatises on Yoga.

The construction of the hut (kuṭī) for rasāyana purposes is a distinctive feature of the *Ānandakanda*, not found in other rasaśāstra texts.

Chapter twenty-two describes a long series of varieties of vandāka or badhnaka, growing on about fifty different plants and trees.⁹⁶

The mūlikābandhas of chapter twenty-three are concerned with the following plants and substances: niśācara (244–260),⁹⁷ aṅganāyikā (261–269ab),⁹⁸ nara-sāra (269cd–286ab),⁹⁹ kañkālākhcarī (286cd–289ab),¹⁰⁰ mantrasīṇhāsānī (289cd–295ab),¹⁰¹ irindarī (295cd–310ab),¹⁰² kṣmāpāla (315–316ab),¹⁰³ ṛṇajyotis (338–341ab),¹⁰⁴ uccaṭā (341cd–346),¹⁰⁵ raktasnuhī (347–348),¹⁰⁶ sthālapadminī (349–355),¹⁰⁷ citraka (356–365ab),¹⁰⁸ jyotiṣmatītaila (365cd–370),¹⁰⁹ dagdharuhā (371–377ab),¹¹⁰ kaṭutumbī (377cd–380ab),¹¹¹ lohadaṇḍa (380cd–386),¹¹² kṣīrakanda (387–392ab),¹¹³ śākavṛkṣa (392cd–398),¹¹⁴ devadālī (399–402),¹¹⁵ śvetaguñjā (403–408),¹¹⁶ and kartārīrasa (409–417ab).¹¹⁷

The udakabandhas of chapter twenty-three describe candrodakabandha (417cd–428ab),¹¹⁸ viṣodakabandha (428cd–446ab),¹¹⁹ saṃjīvanījalakalpa (446cd–466),¹²⁰ uṣṇodakakalpa (467–480ab),¹²¹ and śailodakakalpa (480cd–527ab).¹²²

The ghuṭīkās which follow (23.527cd–557) are prepared with śailodaka,¹²³ the rasāyanakalpas (23.558–584ab) with rasabhasman.¹²⁴ The verses on bandha and related subjects (23.584cd–790ab)¹²⁵ mention several types of this process.¹²⁶

Chapter twenty-four describes four types of jalūkābandha: mardana-, manma tha-, kandarpa-, and madana-jalūkā (24.190cd–208ab). The operations called svedana and saṃnyāsa, described at the end of chapter twenty-five (25.112cd–115ab), are varieties of niyamana.¹²⁷

Chapter twenty-six describes the yantras according to the *Rasendracūḍamaṇi*.¹²⁸ Yantras added are: pātālayantra (91cd–93ab),¹²⁹ dīpikāyantra (93cd–94ab),¹³⁰ ga-ṅgāsāgara- or bhāṭṭīyantra (94cd–99),¹³¹ koṣṭhīyantra (101cd–102),¹³² garbhayantra (103–106),¹³³ haṃsapākayantra (107–108),¹³⁴ mūṣāyantra (109–111),¹³⁵ stanayantra

(112–113), nāgamāyūrayantra (114–117), cakrayantra (118–120ab), khecarayantra (120cd–123), kāpāliyantra (124–125ab), vālukāyantra (125cd–128),¹³⁵ lavaṇayantra (129–130),¹³⁶ bhūḍharayantra (131),¹³⁷ nālikāyantra (132–134ab),¹³⁸ puṭayantra (134cd–135ab),¹³⁹ pātālayantra (135cd–139ab),¹⁴⁰ dhūpayantra (139cd–141ab),¹⁴¹ and adhaḥpātānanayantra (141cd–144ab and 144cd–148ab).¹⁴²

The mūṣās are described according to the *Rasendracūḍāmaṇi*.¹⁴³ Mūṣās added are a second type of vajramūṣā (179–180),¹⁴⁴ the prakāśa- and andhamūṣā (181–184ab),¹⁴⁵ bhasmamūṣā (184cd–185ab),¹⁴⁶ and a third type of vajramūṣā (185cd–186ab).¹⁴⁷

The description of the koṣṭhīs (26.201cd–218ab) has been borrowed from the *Rasendracūḍāmaṇi*.¹⁴⁸ The same applies to the puṭas (26.218cd–237).¹⁴⁹

Verses on vessels and types of fuel are added. Synonyms of the vessel called kūpikā are rūpikā, siddhā, gola and karaṇḍaka (26.238).¹⁵⁰ Synonyms of the vessel called caṣaka are kaṭhorī, cāṭhikā, khorikā, kañcolī and grāhikā (26.239).¹⁵¹

The list of uparasas of chapter one of the kriyākaraṇaviśrānti is longer than in any other text; items found in this list, but not described in chapter one, are cīnakṣāra, lākṣā and gorocanā (1.7cd–8). The metals (loha) are twelve in number: gold, silver, copper, kānta, abhrasattva, tīkṣṇa, muṇḍaka, lead, tin, rīti (= pittala), kāṁṣya, and vartaka (1.9cd–10).¹⁵² The list of the nine gems (ratna) presents the usual series (1.11). The nine uparatnas consist of sūryakānta, candrakānta, tārakānta, kāntaka,¹⁵³ vaikrānta, nīpāvarta (= rājāvarta), sasyaka, vimalā, and peroja (1.12–13ab).¹⁵⁴

Godantī is a synonym of haritāla (1.48). Hīṅgula is of three varieties: carmāra, śukatuṇḍaka and haṁsapāda (1.181cd–182ab). Gairika is of two kinds: svarṇagairika and pāṣāṇagairika (1.191–192ab). Ten varieties of capala are mentioned (1.195–196ab), two varieties of śilājatu: gomūtra- and karpūraśilājatu (1.205). Synonyms of haridrāśman¹⁵⁵ are niśāgrāva, pītāṅga and pītagharṣaṇa (1.128cd). Two varieties of kañkuṣṭha are distinguished: hema- and tārakañkuṣṭha (1.252ab). Kāsīsa is of three types: kāsīsa, puṣpakāsīsa and hīrakāsīsa; some authorities mention four varieties: yellow, black, white and red (1.263–264ab). Four kinds of aphena¹⁵⁶ are described: white or jārāṇa, black or mārāṇa, yellow or dhārāṇa, and karbura or sāraṇa (1.289–290).

A noteworthy feature is the description of sābuṇi and the enumeration of its synonyms (1.308cd–309ab),¹⁵⁷ as well as the description of ākhuṇḍaśāra (1.313cd–315ab).¹⁵⁸ Sarjarasa or rāla is said to be of five varieties: red, yellow, black, white, and multicoloured (1.316–317). Five varieties of guggulu are mentioned: mahīṣākṣa, nīlaka, padma, kumuda, and suvarṇa (1.320cd–321ab).¹⁵⁹ Noteworthy among the kṣāras are lavaṇakṣāra or loṇāra (1.328cd–330ab)¹⁶⁰ and vajrakakṣāra (1.330cd–332ab). Amlavetasa, which has many synonyms, is of two kinds: śaṅkhaśrāvin and māṁṣadrāvin (1.344–347).

Chapter seven of the kriyākaraṇaviśrānti mentions four types of abhrakasattva: kaṭhina, mṛdula, druti and bīja (7.29–30ab). The preparation of the kaṭhina, mṛdu and bīja types is described (7.30cd–60ab); the preparation of the druti type is absent.¹⁶¹ The same chapter gives an account of the preparation of abhrakasattvasindūra, which is red in colour (7.66–86ab).

The red ruby (*māṇḍikya*), found in *Siṃhala*, is called *padmarāga*; the yellow variety, called *kuruvinda*, occurs in *Kālapura*; the *saugandhika*, coloured like an *aśoka* shoot, is found in *Āndhra*; the *nīlagandhi*, of a blue hue, occurs in *Tumburu* ¹⁶² (8.10–11). Diamonds of particular colours are found in *Paṇḍra*, ¹⁶³ on the *Mataṅgagiri*, ¹⁶⁴ in the *Himālaya*, in *Saurāstra*, *Supāra*, ¹⁶⁵ *Kosala*, *Kaliṅga*, and on the banks of the river *Peṇṇā* ¹⁶⁶ (8.49–54ab). ¹⁶⁷ Eight varieties of *vaikrānta* are mentioned (8.177cd–178ab). *Garuḍodgara*, usually one of the names of the emerald, is used as a synonym of *sasyaka* (8.204cd). Synonyms of *peroja* are *harinmaṇi* ¹⁶⁸ and *haritāśman* (8.218).

The sixty-four ¹⁶⁹ *divyaśaḍhis* described in chapter nine are: *somavallī*, ¹⁷⁰ *somavṛkṣa*, ¹⁷¹ *sthalapadminī*, ¹⁷² *gonasā*, ¹⁷³ *uccatā*, ¹⁷⁴ *īśvarī*, ¹⁷⁵ *bhūtakeśī*, ¹⁷⁶ *kr-ṣṇalatā*, ¹⁷⁷ *laśunavallī*, ¹⁷⁸ *rudantī*, ¹⁷⁹ *vārāhi*, ¹⁸⁰ *saptapattrī*, ¹⁸¹ *nāginī*, ¹⁸² *sarpinī*, ¹⁸³ *chattriṇī*, ¹⁸⁴ *gośṅgī*, ¹⁸⁵ *vyotirlatā*, ¹⁸⁶ *raktavallī*, ¹⁸⁷ *patravallī*, ¹⁸⁸ *kākinī*, ¹⁸⁹ *cāṇḍālī*, ¹⁹⁰ *tāmraṅgavallī*, *pitavallikā*, *vijayā*, ¹⁹¹ *mahaśaḍhi*, ¹⁹² *devadālī*, ¹⁹³ *mraṅkṣaṇagandhinī* or *navanītakagandhī*, ¹⁹⁴ *gāruḍavallī*, ¹⁹⁵ *tumbinī*, ¹⁹⁶ *bhūtumbinī*, *gandharvā*, *vyāghrapādī*, *mahaśaḍhi*, ¹⁹⁷ *gomārī*, *triśūlī*, ¹⁹⁸ *rutasiṅgavallī*, ¹⁹⁹ *tridaṇḍī*, *bhṛṅgavallī*, *camarikā*, *karavīralatā*, *vajravallī*, ²⁰⁰ *vāravallī*, ²⁰¹ *rohiṇī*, *bilvinī*, *gorocanalatā*, ²⁰² *akṣarā*, ²⁰³ *apattrā*, ²⁰⁴ *kuṭajavallī*, *mūlakandā*, *brāhmaṇī*, *munivallī* or *ghṛtagandhā*, *nimbakālatā*, *tilakandā*, *ataśivallikā*, *bodhilatā*, *madyagandhā*, *kūrmalatā*, *mādhavī*, *viśālā*, *mahānāgā*, *maṇḍūkatalikā*, *udumbaralatā*, and *citravallī*. ²⁰⁵

Chapter ten describes the following eighty-eight *mahaśaḍhis*: ²⁰⁶ *himaḍi* or *yavaciṇḍā*, *kāravī*, *kaṭutumbī*, *vyotismaṇī*, *līnginī* or *īśvarī*, *pātālagaruḍī*, *girīkarṇī*, *ākṣhukarṇī*, *vārāhi*, *devadālī*, ²⁰⁷ *aindrī* (= *indravāruṇī*), ²⁰⁸ *gojihvā*, *kakatuṇḍī*, *raktapādī*, *punarnavā*, ²⁰⁹ *atyamlaparṇī*, *kartoṭakī*, *śarapuṇikhā*, ²¹⁰ *bhṛṅgarāja*, ²¹¹ *guḍūci*, ²¹² *mūrvā*, ²¹³ *śaṅkhaṇḍī*, *kākajāṅghā*, *śatāvārī*, ²¹⁴ *gokṣura*, *kākamācī*, *āḍityabhaktā*, *nākulī*, ²¹⁵ *kṣīrakandā*, ²¹⁶ *sinduvāra*, ²¹⁷ *araṇyakārpāsī*, *kokilākṣa*, *bṛhatī*, *kaṇṭakārī*, *guṇjā*, ²¹⁸ *vṛddhadārūka*, ²¹⁹ *bākucī*, ²²⁰ *apāmārga*, *prapunnāṭa* (= *cakramarda*), *viśamuṣṭī*, *kāṇḍīra*, *hastikandā*, *samudraśoṣī*, *gorakṣadugdhī*, ²²¹ *bhūpātālī*, *medā*, *mahāmedā*, *kākoli*, *kṣīrakākoli*, *vṛddhi*, *ṛddhi*, *jīvaka*, *ṛṣabha*, *āḍityaputra*, *hastikarṇī*, ²²² *kapikacchū*, *karṇasphoṭā*, *rudrajaṭā*, *nīlikā*, *kośātakī*, *jīvantī*, ²²³ *jatukā*, *muṇḍī*, ²²⁴ *viṣṇukrāntā*, *kumārī*, ²²⁵ *bhūmyāmālī*, *barhicūḍā* (= *mayūraśikhā*), *brāhmī*, ²²⁶ *taṇḍulīya*, *pāśaṇabhedana*, *hastīśuṇḍī*, *kṣudrāmlikā*, *brahmaḍaṇḍī*, *tālī*, *ākāśavallī*, *sahadevī*, *lakṣmaṇā*, *bhūkadamba*, ²²⁷ *tailakandā*, *viṣṇukandā*, *trīkarṇikā*, *nāgadantī*, *droṇapuspī*, ²²⁸ *amṛtasravā*, *putradātṛī*, *śālmālīkandā*, *āvantakī*, and *amlapattrī*.

The list at the end of the chapter adds *haṃsapādī* (10.234).

The author

The author of the *Ānandakanda* is unknown. ²²⁹ Some are of the opinion that it was composed by a follower of the *Bhairava* cult, because the treatise is said to have been expounded by *Bhairava*. ²³⁰ Others suppose the author to have been a resident of *Śrī-śaila*, since this mountain and many sacred places in its vicinity are referred to in the *Ānandakanda*. ²³¹

Date

The fact that the *Ānandakanda* contains material that is also found in the *Rasārṇava* and *Rasendracūdāmaṇi*, two works which are original compositions of their authors, implies that it is probably posterior to the twelfth or thirteenth century.²³² The references to Gorakṣa and Mīnānātha are in agreement with this upper limit. The same applies to the employment of the term gañjā in the vijayākalpa.²³³ The resemblances between parts of the *Ānandakanda* and Nityanātha's *Rasaratnākara* are unsuitable to chronological purposes since the latter work is based on earlier sources.²³⁴

Chapter 2

Āyurvedaprakāśa

The *Āyurvedaprakāśa* by Mādhava¹ is a comprehensive treatise on alchemy in the service of medicine.

Contents

The work consists of about 1,800 verses, mixed with prose,² arranged in six chapters (adhyāya).

Chapter one (sūtasāadhanādhyāya; 597 verses and prose passages) deals with the following subjects, after paying homage to Śiva, Śivā and Heramba (1–2) and a number of verses introducing the subject of the treatise (3–15): the doṣas of mercury (16–22ab); the necessity of its purification (22cd–25ab); the quantity of mercury one should employ in the purificatory processes (25cd–27ab); the ritual to be performed before starting the work (27cd–30ab); the mortar (khalva) and pestle (mardaka) (30cd–31); opinions on the number of the saṃskāras (32); a list of eighteen saṃskāras: svedana, mardana, mūrchana, utthiti, patana, rodha, niyāmana, saṃdīpana, gaganabhakṣaṇamāna, saṃcāraṇa, garbhagatā drutiḥ, bāhyā drutiḥ, jāraṇā, rāga, sāraṇa, saṃkrāmaṇa, vedha, and śarīrayoga (33–34); the first eight saṃskāras, to which the author restricts himself (35); a list of nineteen saṃskāras, i.e., the previous list, to which anuvāsana has been added (36); svedana (37–48); mardana (49–54ab); mūrchana (54cd–62); utthāpana (= utthiti) (63–67); pātana (68–85); bodhana (= rodha; 86–94); niyāmana (95–100); saṃdīpana (101–103); anuvāsana (103–104); jāraṇa of sulphur, gold, mica and the essence of mica, together with many related subjects (107–251);³ garbhadruti and related subjects (252–306);⁴ bāhyadruti (307); sāraṇa (308–311); krāmaṇa (312); rañjana (313–318); vedha (319–326) and related subjects (327–350: rājavatī vidyā and hemavatī vidyā); bandha (351–390); mūrchana (391–396); the reduction to ashes (bhasmīkaraṇa) of mercury, followed by the preparation of rasasindūra and rasakarpūra (397–435); the killing (māraṇa) of mercury (436–463); jalaukābandha (464–469ab); the preparation of the pill called khecarī guṭikā (469cd–480); sevana (the consumption of the mercurial product and the rules to be observed; 481–555), and finally, a number of rasayogas (556–597).

Chapter two (uparasasāadhanādhyāya; 351 verses and passages in prose) is concerned with the uparasas, called thus because some of their properties are similar to those of mercury (rasa). The group consists of gandha (sulphur), hīngula (cinnabar), abhra (mica), tālaka, (manah)śilā, sroto'ñjana, ṭaṅkaṇa, rājāvartaka, cumbaka, sphatikā, śaṅkha, khaṭī, gairika, kāsīsa, rasaka, kaparda, sikatā, bola, kaṅkuṣṭhaka,

and saurāṣṭrī (1–2ab).

The subjects of this chapter are: sulphur, its mythical origin, names, varieties, properties, purification, etc. (2cd–69ab); hīṅgula, its names, varieties, properties, purification, killing, etc. (69cd–86); the names, properties, etc., of girisindūra (87), abhṛaka (88–172), haritāla (173–212), manaḥśilā (213–224), sroto'ñjana and other varieties of añjana (225–242), ṭaṅkaṇa (243–246), rājāvarta (247–252), cumbaka (= kāntaloḥa) (253–255), sphaṭikā (256–258), śaṅkha (259–263), khaṭikā (264–267), gairika (268–272), kāsīsa (273–275), rasaka (276–293), kapardikā (294–302), sikatā (303–305), bola (306–311), kaṅkuṣṭha (312–319), saurāṣṭrī (320–321), abdhīphena (= samudraphena) (322–324ab), kṣudraśaṅkha (324cd–325), śukti and jalaśukti (326–330), mṛttikā (331), paṅka (332) and kampilla (333–335), gaurīpāśāṇa (336–337) and navasāra (338–340), agnījāra and girisindūra (341–342), and bodāraśṅgaka (2.343–344).

Kampilla, capala, gaurīpāśāṇa, navasādara (= navasāra), vahni jāra (= agnījāra) and (giri)sindūra constitute the group of the sādharāṇarasas (345). A list of the uparasas that differs from the one found at the beginning of the chapter follows. This list enumerates gandhaka, vajra (= vajrābhra), vaikrānta, sindūra, bola, gairika, samudraphena, the two kinds of khaṭikā, śambūka (= jalaśukti), tārkṣyaja (= rasāñjana), kāsīsa, kāntapāśāṇa (= kāntaloḥa), varātī (= kapardikā), śukti, hīṅgula, kaṅkuṣṭha, śaṅkha, bhūnāga, ṭaṅkaṇa, and śilājatu (347–349).

A disagreeing view on the rasas and uparasas is quoted; the eight rasas are, according to this authority: abhra, vaikrānta, māksika, vimala, adrija (= śilājatu), sasyaka, capala, and rasaka; the eight uparasas are: gandhāśman (= gandhaka), gairikā, kākṣī (= saurāṣṭrī), kāsīsa, āla (= haritāla), (manaḥ)śilā, añjana, and kaṅkuṣṭha (350–351).

Chapter three (dhātusādhanaḍhyāya; 296 verses and passages in prose) deals with the seven metals (dhātu): gold, silver, copper, tin, zinc, lead and iron (1). The subjects discussed are: the etymology of the term dhātu (2); the connections between a series of nine metals and the nine grahas (3–4ab); a list of seven upadhātus: tāpya (= māksika), vimalā, tuttha, kāṁśya, pittalaka, sindūra, and śailaniryāsa (= śilājatu) (4cd–6ab); gold, its origin, varieties, properties, purification, uses, killing, etc. (6cd–78); the origin, varieties, properties, killing, etc., of silver (79–109), copper (110–147), tin (148–180), zinc (181–183), lead (184–203), iron (204–284ab), and maṇḍūra (284cd–293).

Chapter four (upadhātukāḍhyāya; 140 verses and passages in prose) discusses the upadhātus. Its subjects are: svarṇamāksika, its names, varieties, properties, purification, and the extraction of the essence (1–17); the names, varieties, properties, purification, etc., of tāramāksika (18–24), vimalā (25–33), tuttha (34–44), bhūnāga (45–55), kāṁśya and pittala (56–81), the alloy called pañcaloḥa (82–86), sindūra (87–92), and śilājatu (93–136ab).

An additional upadhātu discussed in this chapter is capala; its varieties, properties and purification are described (136cd–140).

Chapter five (ratnoparatnasādhanaḍhyāya; 184 verses and some passages in prose) describes the precious (ratna) and semi-precious (uparatna) stones. The subjects of this chapter are: generalities about gems (1–3); the names of the nine major gems according to the *Rasapaddhati* and *Viṣṇudharmottara* (purāṇa) (4–6ab); the names of a num-

ber of minor gems (6cd–8); names of the major gems again (9–13); diamonds (vajra), their origin, varieties, blemishes, characteristics and properties, their sizes and value, their assessment and examination (14–50); pearls (mauktika), their origin, varieties, characteristics and properties (51–66); the properties of diamonds, their purification and killing (67–88); the characteristics and properties of coral (pravāla) (89–93), pearls (94–99), rubies (māṇikyā) (100–104), emeralds (marakata) (105–108), vaidūrya (109–114), gomeda (115–119), sapphires (nīla) (120–125), and puṣparāga (126–130); generalities on the gems (131–132); the five most excellent gems (pañcaratna): puṣparāga, mahānīla, padmarāga (ruby), vajra and marakata (133); the eight gems which are called maṇi: vaikrānta, sūryakānta, hīra (diamond), mauktika, maṇi, candrakānta, rājavarta, and garuḍodgāraka (emerald) (134); the stones related to sphaṭika: gomeda, tārkṣya (emerald), vāyaja (= vaidūrya), devejyamaṇi (= puṣparāga), indu (= candrakānta), and taraṇika (= sūryakānta) (135); the names and properties of sphaṭika (136–138), sūryakānta (139–141), candrakānta (142–144), rājāvarta (145–147), and peroja (148–149); the purification and killing of the ratnas and uparatnas (150–154); some generalities on gems (155–159); vaikrānta, its origin, varieties, properties, purification, killing, the extraction of its essence (155–174ab); some generalities on the uparatnas (174cd–176); the connections between the gems and the quarters of the sky, followed by their connections with the grahas (177–178); the liquefaction of gems (179–180); the extraction of the essence from saurāṣṭrī (181–182ab) and sasyaka (182cd–184).

Chapter six (viṣopaviṣādisādhanaḍhyāya; 125 verses and some prose passages) deals with poisonous substances. Its subjects are: the origin of poisons (1–9ab); the names of poison, the eight saumya and ten ugra poisons deriving from bulbous and tuberous plants (9–10); the eight poisonous substances used in medicine (saumya), their characteristics and properties (11–19); the ten poisonous substances not to be employed in medicine (ugra) and their characteristics (20–34ab); the nine vegetable poisons distinguished by some authorities and the localities where they are found (34cd–40);⁵ the colours of the four groups of poisons: brāhmaṇa, kṣatriya, vaiśya and śūdra (41–42); the properties of the poisons (43–47ab), their purification (47cd–61) and employment in medicine (62–79); the symptoms of poisoning and its eight stages (80–86); the treatment of poisoning and the mantras to be employed (87–107); the minor poisons (upaviṣa), seven or nine in number (108–111);⁶ the purification of some upaviṣas: lāṅgalī, guṇjā, viṣamuṣṭi, jepāla, dhūrtabjā, ahiphena and bhaṅgā (112–116); the preparation of viṣataila (117–118); the formula of viṣavajrapātarasa (119–120) and lavaṇabhedisudhānidhirasa (121–122), to be used as antidotes; the preparation of two alkaline fluids (kṣāra) (123–125).

The *Pākāvalī*,⁷ which forms part of the *Āyurvedaprakāśa* according to the colophons of some of its MSS,⁸ is absent from edition c. It is said to deal with mercurial and mineral preparations, and with various decoctions.⁹ One of the MSS begins with the recipe called bṛhatpūgapāka;¹⁰ two MSS end with the formula of mahākāmeśvaramodaka.¹¹ The *Rasayogasāgara* quotes a number of recipes from Mādhava's *Pākāvalī*.¹²

The *Āyurvedaprakāśa* is quoted or referred to in the *Āyurvedīya Khanijavijñāna*, Gulrājśarmamiśra's *Viśikhānupraveśavijñāna*, Hazārīlāl Sukul's commentary on the

Rasaratnasamuccaya, the *Rasadhātuprakāśa*, *Rasakāmadhenu*, *Rasatattvavivecana*, *bhasmapīṣṭiprakaraṇa* of the *Rasoddhāraṇtantra*, and Yādavjī Trikamajī's *Rasāmṛta* and *Siddhayogasaṃgraha*.

The author is quoted as Āyurvedaprakāśakāra and Rasamādhava in Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, as Āyurvedaprakāśakṛt in the commentary on the *Āyurvedābhdhisāra*, as Mādhava in the *Brhadyogatarāṅgiṇī* and Āśubodha and Nityabodha Senagūpta's commentary on the *Rasaratnasamuccaya*, and as Mādhavācārya in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Sources mentioned in the text of the *Āyurvedaprakāśa* are: Bhāluḥ (4.57–58), Bhāskara (1.96–100), *Bhāvaprakāśa* (prose between 2.192 and 193), Govindapādāḥ (2.132), Nāgārjuna (2.281), Nityanātha (2.164), pāścātyāḥ (2.242), *Rasahṛdaya* (1.281),¹³ *Rasapaddhati* (prose between 4.24 and 25), *Rasaratnākara* (prose between 1.65 and 66), *Rasārṇava* (1.127),¹⁴ *Siddhamata* (1.299), and Trivikrama (1.186).¹⁵

Sources mentioned in the Sanskrit commentary of Gulrājśarmamiśra are: Agniveśa (4.110–115), Ātreya (1.538),¹⁶ Bhāluḥ (4.58), *Bhāvaprakāśa* (2.188cd–192),¹⁷ *Gaurīnata* (5.162), Govindapādāḥ (1.262), Hārīta (1.538; 4.107), *Laghuyogatarāṅgiṇī* (2.193–203), Maheśvara (1.108–112),¹⁸ Nityanātha (1.106, 391–394, 485–489ab), *Rājanighaṇṭu* (2.240 and 334–335), *Rasacintāmaṇi* (1.105, 330–334, 428cd–435, 469cd–480),¹⁹ *Rasamañjarī* (2.112),²⁰ *Rasapaddhati* (1.35; 2.78–82, 133–135ab, 211; 3.30, 89–90, 135, 160, 198–199, 202, 255; 4.31–33, 56–57, 131, 133, 136–137; 5.4 and 23–24),²¹ *Rasarājalakṣmī* (1.150 and 398), *Rasaratnākara* (1.106, 153–160ab, 198, 209cd–213), *Rasaratnasamuccaya* (5.67–69ab),²² *Rasavāgbhaṭa* (1.523–525), Śāringadhara (1.174–179 and 205cd–209ab),²³ *Siddhalakṣmīśvaratantra* (1.229–230ab), *Siddhamata* (2.209), Śiva (1.499),²⁴ *Śivāgama* (1.118–121ab and 181),²⁵ *Vāgbhaṭa* (1.65; 2.25, 75, 123–124ab, 285; 3.31–32; 4.108–109; 6.80–85),²⁶ *Vārttikakṛt* (2.115), *Viṣṇudharmottara* (5.5–6ab), and *Yogatarāṅgiṇī* (6.54cd–56).²⁷

Additional authorities mentioned by P.K. Gode²⁸ are: dākṣiṇātyāḥ, Rāmarāja, and *Vṛddhavāsiṣṭha*.²⁹

The number of borrowings from earlier works is much larger than indicated in ed. d.

The Sanskrit and Hindī commentaries of Somadevaśarman on chapter one give almost all the sources of this part of the *Āyurvedaprakāśa*.³⁰ Mādhava appears to be heavily indebted to the author of the *Rasendracintāmaṇi*, from which work he borrowed extensively.³¹

Other sources, mentioned by Somadevaśarman and absent from Gulrājśarmamiśra's commentary, are:³² *Rasapaddhatiṭīkā* (1.191), *Rasaratnadīpikā* (1.351–355), *Rasaratnapradīpa* (1.401–403), *Rasaratnapradīpikā* (1.139), *Rasasaṃketakalikā* (1.182, 203–205ab, 363–365, 455, 497), and *Rasendracūdāmaṇi* (1.57–60).

Special features

The author declares that the contents of his treatise are based on the words of his teacher and his own experience (1.6 and 13).³³

The naisargikadoṣas or mahādoṣas of mercury are eight in number: nāga, vaṅga,

mala, vahnī, cāpalya, viṣa, giri, and asaḥyāgni;³⁴ the most important of this group are viṣa, vahnī and mala (1.16–19ab). The doṣas are twelve in number according to another classification:³⁵ two yaugikadoṣas: nāga and vaṅga, seven kañcukas or aupādhikadoṣas: bhūmija, girija, vārja, two kinds of nāgaja, and two kinds of vaṅgaja, supplemented by the doṣas called viṣa, vahnī and mala (1.19cd–22ab).

The ritual preceding the alchemical enterprise is described very concisely; one should praise one's guru and pay homage to Kanyā (= Kumārī), Vātuka (= Bhairava), Gaṇeśa, the Yoginī, and the Kṣetrapālas (1.27cd–30ab).

The saṁskāra called anuvāsana is described twice (1.104–105).³⁶

Mūrchanā³⁷ is of various types: nirgandha- and sagandhamūrchanā; the nirgandha type is not subdivided; sagandhamūrchanā is of three varieties: bahirdhūma-, antardhūma- and nirdhūmamūrchanā; nirdhūmamūrchanā is of five types: gandhapīṣṭi, gandhabaddharasa, gandhajīrṇarasa, gandhakajjalī, and dhātupīṣṭi (1.137).³⁸ Two particular bijas, borrowed from the *Siddhamata*, are called lohabeḥkī and tārabheḥkī (1.298–299).³⁹ The *Siddhamata* employs the term bheka to designate a dhātu (1.301).⁴⁰ The types of vedha called kuntavedha, kṣepavedha, etc., are not dealt with.⁴¹ The alchemist is advised to sell his artificial gold in the market of a city (1.327).⁴² Methods for making artificial silver and gold by means of the deposition of coloured surface-films are discussed (1.329–350: tāravatī and hemavatī vidyā).

The bandhas of mercury receive much attention (1.351–390). The descriptions of the twenty-five bandhas are taken from the *Rasaratnasamuccaya*.⁴³ A disagreeing view, distinguishing four bandhas, is quoted from an unspecified source; these types are pāṭa-, khoṭa-, jalaukā- and bhasmabandha (1.363).⁴⁴ Pāṭabandha is the same as parpaṭikābandha;⁴⁵ piṣṭibandha results in a khoṭaka;⁴⁶ jalaukābandha⁴⁷ is identical with pakvabandha (1.364);⁴⁸ two varieties of sūtabhasman, the product of bhasmabandha, are mentioned: ūrdhvaga and adhoga; ūrdhvagabhasman is of two kinds: rasasindūra and rasakarpūra (1.365).⁴⁹

A process called mūrchana, but altogether different from the third saṁskāra, also known as mūrchana, makes a bhasman out of mercury (1.391–396).⁵⁰

The twenty uparasas listed in chapter two (2.1) are the same as those mentioned in the *Dhanvantarīyanighaṇṭu* (7.92).⁵¹ The second series of twenty (or twenty-one) uparasas (2.347–349) is not known to me from an earlier work. The third list of eight uparasas (2.350–351) is found in the *Rasahrdaya*, *Rasaprakāśasudhākara*, *Rasendracīḍamaṇi*, and other treatises. The eight rasas (2.350) agree with those called mahārasa in the *Dhanvantarīyanighaṇṭu*.⁵²

Four varieties of sulphur are distinguished: red (called śukatuṇḍa), yellow (called āmalasāra), white (called khaṭikā) and black (2.11cd–13), three varieties of cinnabar: carmāra, śukatuṇḍaka and haṁsapāda (2.70cd–72ab), four varieties of mica: white (= brāhmaṇa), red (= kṣatriya), yellow (= vaiśya) and black (= śūdra), four varieties of black mica: pināka, dardura, nāga and vajra (2.91–93), two varieties of haritāla: patrākhyā and piṇḍasaṁjñaka (2.173–175).⁵³

A time-consuming way of preparing a powerful haritālabhasman from a variety called tabakī is described according to the *Siddhamata*; this process, taking 441 days, results in a product that cures numerous diseases. Twenty-one different plant juices are

employed;⁵⁴ the purified haritāla has to be steeped in or rubbed with each of these juices for twenty-one days, followed by heating of the powder obtained for eight days. The bhasman is claimed to cure all kinds of diseases, amongst which are eighteen disorders of the blood (raktavikāra),⁵⁵ the group of kaṭhinavikāras,⁵⁶ the mūdhavikāras,⁵⁷ phiraṅga, and the ten disorders caused by blood (raktajaroga),⁵⁸ etc. (2.209).

The four varieties of haritāla acknowledged in the *Siddhamata* are bugadādī, godantī, tabakī and piṇḍatāla (2.209).

Three varieties of manaḥśilā are described: śyāmāṅgī, kaṇavīrikā and dvikha-ṇḍākhyā (2.215–217). Two varieties of sroto'ñjana are recognized by the author: sroto'ñjana, which is black, and sauṃvīra, which is white; another classification acknowledges five types: sroto'ñjana, sauṃvīra, rasāñjana, nīlāñjana and puṣpāñjana (2.225–227); the variety called kulatthikā is added (2.240–241). Capala is regarded as a sādhaṇarāsa, but hīṅgula and mṛddārasṅga are not mentioned as belonging to this group (2.345). Rājāvarta, considered to be one of the uparasas or a ratna, is of two kinds: rakta and nīla (2.247–248). Two kinds of khaṭikā are described: khaṭī and gaurakhaṭī (2.264). Three varieties of gairika are distinguished: svarṇa-, sāmānya- and pāṣāṇkhyagairika (2.268–269), two varieties of kāsīsa: pāṃsu- and puṣpakāsīsa (2.273), two varieties of rasaka or kharpara: dardura and kāravellaka (2.276–278ab), three varieties of kapardikā or varāṭikā: red, white and yellow (2.294–295), supplemented by a black type with white spots (2.295cd–296ab), three varieties of bola: rakta, śyāma and manuṣya (2.306), and two varieties of kaṅkuṣṭha: nalikākhyā and reṇuka (2.312). Kaṅkuṣṭha is regarded as a substance found in the Himālaya, but disagreeing opinions are given too (2.312–317). Two varieties of gaurīpāṣāṇa are described: a white artificial one, and a yellow, naturally occurring one (3.336–337), and two varieties of bodārasṅga: yellow and pale (3.343).

The metals (dhātu) are seven or nine in number; the series of seven consists of gold, silver, copper, tin, zinc, lead and iron (3.1); the series of nine metals, connected with the nine grahas, comprises gold, silver, copper, tin, lead, tīkṣṇaka, āra (= pittala), kāṃṣya and vartaloḥa (3.3–4ab). The usual varieties of gold, silver, copper, tin and lead are described. The three varieties of muṇḍaloḥa are mṛdu, kuṇṭha and kaḍāraka (3.206); the six varieties of tīkṣṇaloḥa are kharākhyā, sārasaṃjñaka, huntāla, tārāvatta, vājira, and kālaka (3.207); the five varieties of kāntaloḥa are bhrāmaka, cumbaka, karṣaka, drāvaka and romaka (3.208). Three varieties of vimāla are described: svarṇa-, rūpya- and kāṃsyavimāla (4.27), two varieties of pittala (brass): rājāritikā and kākatuṇḍī (4.69). The alloy, called pañcaloḥa or bharta, consists of bronze (kāṃṣya), brass (pittala), copper, lead and tin (4.83).

Śilājātu has its origin in rocks or an alkaline earth (4.93); the first kind is of four varieties: sauvarṇa, rājata, tāmra and āyasa (4.94–98); another kind of śilājātu, used in fireworks (agnibāṇa),⁵⁹ is called soraka (4.133). The usual four varieties of capala are mentioned: white, black, yellowish green (harit) and red (4.136).

The nine major gems (ratna) are, according to a quotation from the *Rasapaddhati*: vajra (diamond), vidrūma (coral), mauktika (pearl), marakata (emerald), vaidūrya, gomedaka, māṇika (ruby), harinīla (sapphire), and puṣpadṛśad (topaz); the same

series is found in the *Viṣṇudharmottarapurāṇa*, cited by Mādhava (5.4–6ab). Minor gems (uparatna) mentioned by name are: vaikrānta, sūryakānta, candrakānta, rājāvarta, lāla,⁶⁰ peroja, muktāśukti, śaṅkha, karpūrāśman, and coloured glass (kācaja maṇi) (5.6–8). Two varieties of peroja (turquoise) are described: bhasmāṅga and harita (5.148); eight varieties of vaikrānta are referred to (5.164).

The ten poisons, derived from bulbous or tuberous plants (kandabhava), which may be used in medicine (saumya), are: saktuka, mustaka, kaurma, dārvika, sārṣapa, saikata, vatsanābha and śvetaśṛṅgī (6.11); the ten ugra poisons to be avoided in medicine are: kālakūṭa, meṣaśṛṅgī, darduraka, hālāhala, karkoṭī, granthi, hāridra, raktaśṛṅgī, kesara, and yamadaṇṣṭrā (6.20–21). The nine vegetable poisons distinguished by other authorities are: vatsanābha, hāridra, saktuka, pradīpana, śṛṅgika, kālakūṭa, saurāṣṭrika, and hālāhala; they are said to be found in mountainous regions, in haridrā regions,⁶¹ in the mountains, in flat regions, in Surāṣṭra, in the vicinity of kapilā riverbanks, in Ahicchatra, on the mountain Kiṣkindha, and on the mountain called Brahma respectively (6.40).⁶² The minor poisons of vegetable origin (upaviṣa) are seven in number: arka, sehuṇḍa, dhattūra, lāṅgalī, karavīraka, guñjā, and ahiphena (6.108); their number is nine according to other authorities: arka, snuh (= sehuṇḍa), lāṅgalī, guñjā, hayāri (= karavīra), viṣamuṣṭi, āphena (= ahiphena), unmatta (= dhattūra), and jepāla (6.111). An added item is bhaṅgā.

The extent to which the *Āyurvedaprakāśa* consists of quotations from earlier treatises is, in particular, elucidated in Somadevaśarman's commentary. The glosses in prose can be attributed to Mādhava himself, who does not hesitate to give his own opinion on some issues⁶³ and refers to the tradition transmitted by his guru.⁶⁴ The views adopted by him are repeatedly indicated, followed by disagreeing opinions.

In several instances the vernacular name of a substance is recorded.⁶⁵

The author

The author's name is Śrīmādhava Upādhyāya of Sārvasvata lineage, born in Saurāṣṭra, but residing in Kāśī.⁶⁶

Date

The earliest MS of Mādhava's *Pākāvalī* may be completed in A.D. 1713 or 1813.⁶⁷ The earliest MS of the *Āyurvedaprakāśa* dates from A.D. 1786 (IO Nr. 2696); the original of another MS may have been written in A.D. 1673/74.⁶⁸

Two sources of the *Āyurvedaprakāśa*, namely the *Rasapaddhati* and the *Yogataraṅginī*, belong to the first half of the seventeenth century. The quotations from the *Bhāvaprakāśa* and the *Rasapaddhati* prove that Mādhava Upādhyāya is later than the sixteenth century.

The evidence available establishes that the *Āyurvedaprakāśa* dates from the second half of the seventeenth century.⁶⁹

Commentaries

A Sanskrit commentary, called *Arthavidyotinī*, on the whole of the *Āyurvedaprakāśa*, was written by Gulrājśarmamiśra.⁷⁰

This useful and lucid commentary quotes from and refers to the following authorities and works: Āḍhamalla (1.174–179), Āḍityahṛdaya (1.139),⁷¹ Āgama (1.396), Amara,⁷² Ānandakanda (1.363), Ātreya (2.338–340), *Bhagavadukti* (1.130), *Bhāratiyarasaśāstra* by Desāi (2.276–278ab),⁷³ Bhartṛhari (1.130), *Bhāvaprakāśa* (1.418–425; 6.25–34ab), *Bhāvaprakāśanighaṇṭu* (2.276–278ab),⁷⁴ *Bhuśundopākhyāna* (1.133–134ab),⁷⁵ Bindu (2.133–134ab),⁷⁶ *Brhadvāsistha* (1.133–134ab),⁷⁷ Caraka (1.113, 127, 382, 539, 540, 547, 559cd–561; 3.295–296), Cūḍamaṇi (2.234 and 350–351; 3.77–78, 205, 244–245ab),⁷⁸ Ḍallaṇa (2.316–317), *Devayāmalaka* (1.481), *Devendragiri* (3.140–142),⁷⁹ *Ḍhūḍhukanātha* (1.401–403; 3.93–96),⁸⁰ Garigādhara (1.547),⁸¹ Gorakṣanātha (1.137), Govinda (1.277–280 and 308–309),⁸² Govinda-bhikṣu (1.323),⁸³ Hājārīlāśukula (1.466–469ab),⁸⁴ Hemacandra (1.509–522),⁸⁵ Hemādri (2.316–317; 6.90–95), Kālanātha (1.137 and 401–403),⁸⁶ *Lohapaddhati* (2.253; 3.207cd and 208–209), *Mahābhārata* (1.130), Maheśvara (1.108–112 and 136),⁸⁷ Medinī (1.136), Nāgārjuna (2.281–283), Nandin (2.270–272), Nārāyaṇa (3.192cd–193), *Nighaṇṭu* (1.162cd–163, 397, 428cd–435),⁸⁸ *Nighaṇṭurāja* (1.173), Nityanātha (1.106), Padmanābhasūnu (2.273–275),⁸⁹ Pāṇini (1.3), Raghunāthasampradāya (1.463), *Rasacintāmaṇi* (1.137 and 251), *Rasadarpaṇa* (1.187), *Rasahrdaya* (often), *Rasakāmadhenu* (often), *Rasamañjarī* (often), *Rasamārtanḍa* (1.52–54ab), *Rasāmṛta* (3.1 and 25–26), *Rasapaddhati* (often), *Rasapaddhatiṭkā* by Mahādeva (2.141–142; 4.133), *Rasaprakāśasudhākara* (often), *Rasaratnākara* (often), *Rasaratnasamuccaya* (often), *Rasaratnasamuccayaṭikā* (2.276–278ab; 4.30), *Rasārṇava* (often), *Rasasamketakalikā* (1.399–400, 436–441), *Rasasāra* (often), *Rasatarāṅginī* (1.174–179, 399–400, 442–444ab, 444cd–448, 483), *Rasavāgbhaṭa* (2.273–275; 3.1, 6cd–10ab and 190–192ab), *Rasāyanasāra* (3.177cd–180 and 192cd–193ab), *Rasāyanasārasaṃgraha* (1.362), *Rasendracintāmaṇi* (often), *Rasendracintāmaṇiṭkā* (1.192), *Rasendracūḍamaṇi* (often), *Rasendrasārasaṃgraha* (often), Śaivālabhakṣya (1.191), *Śaktiyavatāra* (1.88–89), *Śāligṛāmanighaṇṭubhūṣaṇa* (1.277–280), *Sāṅkhyakārikā* (1.131 and 132), Śārngadhara (1.174–179; 3.282cd–284ab), *Śārngadharatippaṇī* (3.52cd–53), *Siddhabhaiṣajyamañjūṣā* by Jayadeva and its vyākhyā (3.30), *Siddhabheṣajyamañimālā* (3.177cd–180), *Śivāgama* (1.118–121ab), *Śivamata* (3.3–4ab), *Śrīmadbhāgavata* (1.131), Suśruta (1.7, 127; 2.209; 3.30; 6.78–79 and 80–86), *Ṭoḍarānanda* (1.191 and 367), *Vāgbhaṭa* (1.1), *vaijñānikāḥ* (2.350–351; 5.27), *Vāsiṣṭhamahārāmāyana* (1.133–134ab),⁹⁰ *Veda* (1.1), Yaśodhara (2.91–93),⁹¹ and yūnānīgranthakārāḥ (2.341).

The author of this commentary mentions rather often variant readings of the text of the *Āyurvedaprakāśa*.⁹²

Somadevaśarman wrote two commentaries on chapter one of the *Āyurvedaprakāśa*, one in Sanskrit and called *Pradīpa*, the other in Hindī and called *Uddyota*.

Authorities and works quoted or referred to in these commentaries are:⁹³ *Ānandakanda* (1.223–228, 391–394, 433cd–435, 458–459, 460), *Aṣṭāṅghṛdaya* (1.130),

Bhagavadgovindapāda, *Bhāvaprakāśa*, *Brhadrasarājasundara* (1.123–126 and 399–400), Cakrapāṇi's *Cikitsāsaṃgraha* (1.5), *Ḍhruḍhukanātha* (1.1), Govinda (1.307), *Mahābhārata* (1.130), *Rasacintāmaṇi*, *Rasaḥḍaya*, *Rasakāmadhenu*, *Rasamañjarī*, *Rasamārtanḍa* (1.283–285), *Rasāmṛta* (1.408), *Rasapaddhati*, *Rasapaddhatīṭikā*, *Rasaprakāśasudhākara*, *Rasaratnadīpikā*, *Rasaratnākara*, *Rasaratnapradīpa*, *Rasaratnapradīpikā*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasaṃketakalikā*, *Rasasāra*, *Rasasindhu* (1.123–126), *Rasataranḡṇī*, *Rasendracintāmaṇi*, *Rasendracūḍāmaṇi*, *Rasendrasārasaṃgraha*, *Rudrayāmala* (1.123–126), *Sāṅkhyatattvakaumudī* (1.131), *Śāringadharasamhitā*, Somadeva, *Vāgbhaṭa*, *Vaidyakaśabdasindhu* (1.426–428ab), *Viśva* (1.5), *Yaśodhara*, *Yogarātnākara*, *Yogataranḡṇī*, and *Yogavāsiṣṭha* (1.133–134).

Somadevaśarman systematically indicates the metres of Mādhava's verses. Occasionally, he criticizes the readings adopted in ed. a.

Somadevaśarman was a Sārasvata brāhmaṇa, son of Raghunandanaśarman; he lived in a village called Bhavīgarh in the vicinity of Alīgarh.⁹⁴

Chapter 3

Gorakṣasaṃhitā

The *Gorakṣasaṃhitā*¹ is a Tantric text, part of which deals with alchemy.

Contents

The edited text of the treatise² is divided into two sections, a *Kāḍiprakaraṇa* in twenty-seven chapters (*paṭala*) on Tantric subjects,³ and a *Bhūtiprakaraṇa* in nine chapters (*paṭala*) on alchemy.⁴ The *Bhūtiprakaraṇa* is written in the form of a dialogue between *Śrīkaṇṭha* (= Śiva) and Śakti.

Chapter one of the *Bhūtiprakaraṇa* (*rasaphalāphalavarṇana*; 123 verses) is of an introductory character. Some of its subjects are: the secret nature of the alchemical art, the persons to whom it may be transmitted, the praise of mercury, and the treatises on alchemy which the work summarizes.

Chapter two (*dravyasaṃgrahaṇa*; 105 verses) is about the *nibandhana* of mercury (1–5ab), the eight *rasas* (5cd–20ab), the eight *uparasas* (20cd–29), the eight *rasalo-has* (30–40), precious and semi-precious stones (41–52), a substance of animal origin (53–56), the six kinds of salt (57–59), the three kinds of *kṣāra* (60ab), poisonous substances (60cd–65a), oils (65b–66), *vasā* (67–68ab), urine (68cd), semen and menstrual discharge (69), *kṣāras* (69cd–73ab), *jāraka* substances (73cd–77), *drāvaka* substances (78–81), acids (*amlāni*; 82–85), the *rakta-*, *pīta-*, *kṛṣṇa-* and *sitavarga* (86–97), and some alchemical operations (98–105).

Chapter three (*dhātuśuddhi*; 97 verses) is concerned with the eighteen *saṃskāras* (3cd–6), the eight *saṃskāras* (*aṣṭavidhā śuddhiḥ*) resulting in the purification of mercury (7–25ab), and the purification of the *rasas*, *uparasas* and *lohas* (25cd–97).

Chapter four (*jīvotsargavidhāna*; 152 verses) discusses the *bandha* of mercury; four types of *bandha* are referred to (3cd–4); several alchemical operations are described, in particular *sattvapātana*, and some apparatus (6cd–116);⁵ the construction of the alchemical workshop (*rasamaṇḍapa*) and its inventory are dealt with (117–129ab); the chapter ends with verses on good and bad types of teachers (129cd–152).

Chapter five (*bījasaṃbandha*; 302 verses) deals with *samukhacāraṇa* (5–44), *nirmukhacāraṇa* by means of divine herbs (45–57ab), types of *grāsa* (65–79ab), *biḍa*, *bīja*, and several operations (*garbhadruti*, *rañjana*, etc.) (79cd–302).

Chapter six (*rasoparasakarman*; 582 verses) is about alchemical operations involving *sūryakānta* (8–36ab), *candrakānta* (36cd–50ab), *tārakānta* (50cd–60), *capala* (61–70ab), *vajra* (70cd–79), *raktābhra* (80–96ab), *sasyaka* (96cd–117ab), *adrija* (117cd–125; = *śilājatu*), *vimala* (126–182), *mākṣika* (183–250ab), *rasaka* (250cd–297), *darada*

(298–309ab), gandhaka (309cd–422ab), gairika (422cd–535ab), and sauvīra (535cd–582).

Chapter seven (divyauṣadhilakṣaṇakarman; 374 verses)⁶ describes the sixty-four divine herbs (divyauṣadhi; 1–106) and their uses in alchemical operations (107–152); the middle part of the chapter is devoted to vegetable poisons and their uses (153–209ab); the last part of the chapter contains a long amlavetasakalpa (209cd–326) and rules concerning the use of rasāyana preparations (350–374).

Chapter eight (229 verses)⁷ gives an account of the origin of (ayas)kānta and its uses, followed by verses on some other dhātus and related subjects.

Chapter nine (śivasūtra, rasāyanavidhi; verses 74–141)⁸ gives rules for the adepts and describes the results of their efforts.

The only authority mentioned is Nandin (9.134).

Special features

The Bhūtiprakaraṇa of the *Gorakṣaśaṃhitā* is mainly devoted to alchemy and the objectives of its quest: dehasiddhi and lohasiddhi; preparations which are curative of particular diseases are occasionally dealt with, for example in the amlavetasakalpa (7.210cd–326).⁹

The arrangement of the material is not very systematic. The first eight of the eighteen saṃskāras are described, the remaining ones are referred to. The yantras, mūṣās and puṭas are not characterized; the substances used in alchemical operations, their varieties, properties, etc., are incidentally described. Several groups of substances and the items belonging to these groups are, however, dealt with in chapter two. The divine herbs are discussed in chapter seven.

The main accent of the Bhūtiprakaraṇa is on the bandha of mercury. A term used to designate alchemy is bhūtitantra (2.101; 3.1) or bhūtīśāstra (2.3; 4.3). Bhūti is a term frequently employed to designate one of the aims of the alchemist; other aims mentioned are the usual ones: āyus (7.374), cakravartitva (1.109), divyadehatva (5.176), khecaratva (5.168), the siddhis (5.177), etc., next to the making of artificial gold and silver.

Śiva worship is a conspicuous feature. Mantras are repeatedly referred to; examples are the aghoramantra (6.45; 7.162), kāmikamantra (7.163), viśvarūpā vidyā (6.477 and 479; 9.130), and trailokyādāmaramantra (7.163).

Grammatical faults are rather frequent.¹⁰ Some vernacular terms are also met with.¹¹

Chapter one relates that a very large alchemical work (a rasatantra), in 25,000 verses, was once revealed by Svacchanda (= Śiva). Basing themselves upon this work, several gods composed their own treatises on the subject; these treatises are: Devī's *Mahodadhi* in 12,000 verses, Umā's *Rasopaniṣad* in 6,000 verses, Guha's *Rasatantra* in 6,000 verses, Vīrabhadra's *Rasatantra* in 1,000 verses, Śukra's *Rasāvaloka* in 6,000 verses, Bṛhaspati's *Rasacakra* in 8,000 verses, Candra's *Rasāṅkuṣa* in 10,000 verses, and Vināyaka's *Rasodaya* in 8,000 verses (1.111–120). The Bhūtiprakaraṇa is said to be an abridgement of Śiva's original work.¹²

Chapter two describes mica (ghana) as originating from Umā's yoni (6ab); mica is of four colours: white, yellow, red and black (6cd); two varieties only are distinguished: vajra and māṇḍūkā (27).¹³ Mica is one of the eight (mahā)rasas:¹⁴ abhṛaka or ghana, vaikrānta, vimāla, rasaka, śaila, māḥṣika, darada (= hiṅgula), and sasyaka (19–20). Several varieties of vaikrānta are referred to (8cd). Vimāla is of two kinds: white and yellow (11cd–12ab),¹⁵ rasaka of three kinds: mṛttikārasaka, guḍābha and pāṣāṇābha (12cd–13), śaila of four kinds, different in colour (14), māḥṣika of two kinds: white and yellow (15ab), or of four types: kadambākāra, golakākāra, kāravellakasaṃnibha, and āṅgulīyaka (15cd–16), darada (cinnabar) of three types: camari,¹⁶ śukatuṇḍa and haṃsapāda (17), and sasyaka of one type (18ab).

The eight uparasas are: gandha (sulphur), (harit)āla, gairika, (manaḥ)śilā, kāṅkṣī, kāsisa, añjana, and kaṅkuṣṭha (28cd–29).¹⁷ Haritāla is of two kinds: pale red (pātāla) and yellow (22ab), gairika of one type (22cd–23), manaḥśilā of one type (24ab),¹⁸ kāṅkṣī of two types: śyāmā and kapilā (24cd), kāsisa of three types: white, śyāma and yellow (25cd–27ab);¹⁹ añjana²⁰ and kaṅkustha are of one type (27cd–28ab).

An unusual group of eight rasalohas²¹ is described, which may, partly at least, consist of substances called sattva in other texts.²² The group consists of: kāntaja, khuraloha,²³ nānākārāśmaja, khaja, vaikrāntakodbhava, śailaja, sasyakasaṃbhava, and māḥṣikamalaja; the colours and properties of these rasalohas are mentioned (30–40ab).

The six metals (āyasa) are: gold (agni), silver (soma), copper (arka), iron (tīkṣṇa), tin (vaṅga), and lead (nāga) (40cd).

The five rasaratnas (precious stones) are: padmarāga (ruby), indranīla (sapphire), marakata (emerald), puṣparāga (topaz), and vajra (diamond) (44cd–45ab). Nṛpāvarta (= rājāvarta), tuttha, vidruma, and artificial gems (viḍāmbaka: mock gem) are called the maṇīrasas (47).²⁴ The group of the three mahāmaṇīs consists of sūryakānta, candra-kānta and tārakānta (48–50ab).

Substances useful in the bandha of mercury are: mṛṅganābhi (musc), māthara, ambujaśūka (= jalaśūka), the milky juice (payas) of rakṣura, niśāra or nṛśāra, gautamakṣāra, tagara, nāgasamjñita, lelītaka, srotaja, kṛṣṇāgaru, and sita (50cd–56). The six types of salt are: sāmudra, saindhava, viḍa, sauvarcala, romaka, and culikā-lavaṇa or navasāra (58–59). The three caustics (kṣāra) are: yava(kṣāra), svarjika and ṭaṅkaṇa (60ab).

The five (major) poisonous substances are: śaktuka, kṣṇa, śṛṅgika, mustaka and vatsanābha (60cd–64ab). The five upaviṣas are: snuḥī, arka, karavīra, lāṅgalī and vi-ṣamuṣṭika (64cd–65a). Oils used in alchemical operations are extracted from the plants called jyotiṣmatī, naktamāla, rubuka (= eraṇḍa), āruṣkara, akṣa, aṅkola, palāśa, bākucī, apāmārga, and unmatta (65b–66). The fatty substances (vasā; 67–68ab), urines (68cd), kinds of semen and menstrual discharge (bīja, puṣpa; 69ab) used are enumerated. A pittavarga and viḍvarga are absent.²⁵

The list of plants from which a kṣāra may be prepared is long. The plants mentioned are: apāmārga, arka, aśvamāra, caṇaka, eraṇḍa, gotama, gūthavṛkṣa, kadālī, ka-ñcukī, kāraka, kuṭaja, mokṣaka, muṣṭika, niḥṣāra, nikura, niṣpāva, palāśa, rakṣuraka, raktamāla, snuḥī, suradālī,²⁶ tila, udumbarī, unmatta, vajrakandaka, varṣābhū, and vā-

stuka (69cd–72). A list of acids derived from plants follows (82–84). The substances belonging to the rakta-, pīta-, kṛṣṇa- and śvetavarga are enumerated towards the end of the chapter (86–97).

Chapter three mentions the following eighteen saṃskāras: svedana, mardana, mūrchana, utthāpana, pātana, dīpana, nirodha, niyāmana, cāraṇa, garbhasaṃdrāva, jāraṇa, pātana again, grāsapramāṇa, rañjana, sāraṇa, krāmaṇa, vedha, and śarīravāpa (4–6).²⁷

Five plants are called the five kumārikās: karkoṭī, ūṣanetrā, śukatuṇḍā, vāyasī and javā (16); ūṣapatrā, agnija, varya and the two vaṭamālās are the five vāruṇas (17cd–18ab).

The drāvika plants enumerated are: bāṣṭikā, ciñcikā, halinī, kaṇā, kañcukī, kāravallikā, koṣātakī, kumārikā, prāvṛttā, suradālī, sūryāvarta, vajrakanda, and vandhyā (70–71).²⁸

Chapter four refers to four types of bandha (3), but describes only dravabandha (6); gola- and bhasmabandha are mentioned without being characterized (4).²⁹ The colours of the flames produced by various substances are mentioned (113–114).

Chapter five enumerates sixty-four plants used in the bandhana of mercury: ahilocanā,³⁰ ajamārī, alambuṣā, añjalikārī, aparājītā, apatrā, ardhacandrā,³¹ bimbī, brāhmī, brhatī, citraparṇī,³² dantī, durgandhā, gāruḍī, gojihvikā, halinī, haṃsapādī, hemapuṣpikā, īśvarī, jalamūlikā, jalaparvāmbuṣītā,³³ jalapippalī, jalodbhavāpāmārga, jvālīnī, kapotī, kṣīrī, kumārī, kumbhaka, kurkurī, lakṣmaṇā, māṇṣī, māṇḍūkī, mā-rjārapādikā, meghanādā, meṣakā, mīnākṣī,³⁴ mohinī, mūrti, muśalī, nāginī, nandinī, pāṣāṇabhedikā, prasārīṇī (sthalaajā prasārīṇī), samaṅgā (sthalaajā samaṅgā), samaṅgā (vārisaṃbhūtā samaṅgā), saracandraukasa, sārīkā, sarpasugandhikā, śikhā, śikhipādī, sitagandhā khagā, śukanāsā, triparṇikā, tulasi, tuṣi, upāmbu, upodīkā, utpalī (jalaajā utpalī padmā), uttamā, vajrakandaka, vanakārpāsī, vanamālā, vanārjikā, vārāhī, vāyasī, vidārī, vṛṣcikalikā, and yavaciñcī (46–57).³⁵

The types of rasa that are formed on the addition of grāsa are called daṇḍadhārīn or daṇḍadhṛk, pāyasa or payasākāra, jalūkā or jalaukākaravat, vidruṣa, chedin, dadhivat, navanāta, and piṇḍa or khaṇḍa (65–71).³⁶

Chapter six mentions the usual four varieties of capala (64ab). The mahārasas rasa and rasaka are praised for their suitability to make artificial gold and silver (269cd–270ab). Dānavendra is a term repeatedly employed to designate sulphur (294, 309, 315, 356, etc.).

Chapter seven is concerned with plants used in alchemy: divyaūśadhis, mahauśadhis and rasaūśadhis (5), divided into the following types: tṛṇa, gulma, latā, vallī, vṛkṣa, and visarpiṇī (6).³⁷

The plants described³⁸ are: ajagarī (21–22ab), āmrātakī (34), aṃśumatī or rudantī (26cd–28ab), aśokā (36), āsurī (85cd–86ab), bhedinī (52cd–53ab), bhṛṅgā (93ab), bhūkadamba (25–26ab), bhūtakeśī or kṛṣṇavallī (24), bilvātakī (100), brahmadāṇḍī (64cd–65), camarī (93cd–94ab), chattrī (39cd–40ab), devaśrī (75–77ab), devī (42), gandharvī (86cd–87ab), gāruḍī (80), gomārī (87cd–88ab), gonasī (22cd), gorocanā (101–103), gośṛṅgī (58–59), hemadaṇḍā (69), hemalatā (84cd–85ab), īśvarī (23cd), jayā (74), jyotiṣṭṛṇa, jyotiṣvṛkṣa, jyotiṣkanda (61cd–62ab), kālakarṇī (48cd–49ab), karavīrī (94cd–95ab), khadirapattrikā (60–61ab), kīṭamārī (77cd–78), kṛṣṇacitraka or

goptar (44), madhutṛṇā (67cd–68), nāginī (38cd–39ab), naradevī (56cd–57), nīlotpalā (49cd–50ab), padmaḍaṇḍī (66–67ab), palāśavallī (45–46), pītamustakikā (97), punnā-gapattrikā (37–38ab), rājanī (50cd–51ab), raktavallī (62cd–64ab), rohiṇī (99), saṃvarī (28cd–30ab), śataparvā (33), savarī (40cd–41), sirphikā (51cd–52ab), śirīṣā (88cd), somā (7–8ab),³⁹ somavallī (9–19ab), somavṛkṣa (8cd), śrījayā (71–72ab), sthalaṇḍī padminī (19cd–20), tāmbūlapattrī (70), tārāṇā (47–48ab), tilakā (53cd–54ab), tridaṇḍī (92), tripattrā (35), trīśalyā (104–105), trīśūlī (90–91), tumbinī (81–84ab), uccaṭā (23ab), vajrā (95cd–96), vajravallī (43), vanakustambarī (89), vārāhī (30cd–31ab), vijayā (72–73), vīravallī (798), and vyāghrī (79).⁴⁰

An otherwise unknown disorder, called somavṛddhi, is referred to (15).

The amlavetasakalpa gives an account of the mythical origin of this plant (210cd–213) and its appearance (214–216ab); its juice is described as a powerful solvent (drāvaka; 229–233ab).

The style and terminology of the Bhūtiprakaraṇa of the *Gorakṣasaṃhitā* are distinctive, although in some respects reminiscent of the *Rasopaniṣad*.⁴¹ Mercury is very often referred to as śarvaja⁴² and sūtaka, gold as mātara⁴³ or mātṛkā,⁴⁴ copper as aravinda,⁴⁵ etc.

Compounds with the element cakra- are not rare.⁴⁶

The terms sṛṣṭi and sṛṣṭitraya are frequently employed.⁴⁷ A large number of technical terms are not explained.⁴⁸ The same applies to the preparation of various substances employed in alchemical operations, for example: jyotistaila,⁴⁹ rāgasneha,⁵⁰ raktasneha,⁵¹ and raktataila⁵² (probably synonyms of rañjanataila).⁵³ Sneha is used in the sense of taila⁵⁴ or vaśā.⁵⁵

Some mūṣās referred to are agnimūṣā (5.146; 6.575), dharāmūṣā (7.139), and dīrghamūṣā (4.52; 5.135).

Some noteworthy names of plants are ambujaśūka (= jalaśūka; 2.51), amlavallī (2.83; 6.334), candravallī (2.96), cirpotikā (5.123), codyavṛkṣa (8.85), gandhā (2.94), jalaśūka (6.451 and 467), leṭitaka (2.52; 6.385 and 472), māṭhara (6.214, 314, 320, 395, 453, 467, 544), rājārka (8.213), rakṣura (2.51), rakṣuraka (2.72), raktagocandanā (6.491), raktāpāmārga (6.340 and 492; 7.189), śrīhastinī (4.72), trirakṣā (6.489), and vṛṣodara (9.123).

The author

The author mentions his name, Gorakṣanātha, at the end of the treatise, adding that he wrote it⁵⁶ for the benefit of a king called Siṃha (9.135–136).⁵⁷

Works, attributed to Gorakṣa(nātha), are, apart from the *Gorakṣasaṃhitā*, the *Bandhasarvasva*,⁵⁸ a *Kāmaśāstra*,⁵⁹ and the *Raseśvarasiddhānta*.⁶⁰ Gorakṣa(nātha) is moreover credited with a large number of non-medical works.⁶¹

The *Gorakṣasaṃhitā* is not quoted as such in medical treatises,⁶² but citations from the *Svacchandaśaktyavatāra*⁶³ and works with related titles may be from some version of the Bhūtiprakaraṇa.⁶⁴

The *Svacchandaśāstra* is quoted in Ṭoḍara's *Āyurvedasaukhya*.⁶⁵ The *Svacchandaśaktyāgama* is quoted in Viṣṇudeva's *Rasarājalakṣmī*,⁶⁶ the *Rasaratnapradīpa*, the

Rasasindhu, and Ṭoḍara's *Āyurvedasaukhya*.⁶⁷ The *Svacchandaśāktiyāgama* is quoted in Acyuta's *Rasaṃgrahasiddhānta* and the *Rasarājalakṣmī*. The *Śaktyavatāra* is quoted in one of the *pariśiṣṭas* of the *Ānandakanda*,⁶⁸ *Gulrājśarmamiśra*'s commentary on the *Āyurvedaprakāśa*,⁶⁹ and the *Rasatattvavivecana*.

Gorakṣa is quoted or referred to on subjects connected with āyurveda or rasa-śāstra in the *Bṛhadrasarājasundara*,⁷⁰ *Cidghanāndanātha*'s *Satkarmasaṃgraha*,⁷¹ the *Rasakāmadhenu*,⁷² *Rasaratnadīpikā*,⁷³ *Rasaratnākara*,⁷⁴ *Hazārīlāl Sukul*'s commentary on the *Rasaratnasamuccaya*,⁷⁵ *Śivamiśra*'s *Vaidyaśāstraśivānubhava*, *Ṭoḍara*'s *Āyurvedasaukhya*,⁷⁶ *Trimalla*'s *Bṛhadyogatarāṅgiṇī*⁷⁷ and *Yogatarāṅgiṇī*,⁷⁸ and the *Vaidyacinātmaṇi*.⁷⁹

Some formulae attributed to Gorakṣanātha are *candreśvarī guṭikā*⁸⁰ and *gorakṣa-vaṭī*.⁸¹

Gorakṣa(nātha) is the most famous of the nine Nāthasiddhas.⁸² Gorakṣa is mentioned as a *Rasasiddha* in the *Rasatarāṅgiṇī* and *Rasendrasambhava*, as a *Mahāsiddha* in the *Haṭhayogapradīpikā*,⁸³ and as a *Nātha* in the *Ānandakanda*.

Date

The *Bhūtiprakaraṇa* of the *Gorakṣasaṃhitā* gives the impression of being an early work on rasaśāstra: the terms *dhātu* and *upadhātu* are not yet used; zinc is not described; the essence (*sattva*) of *rasaka* (i.e., zinc), although known (6.260, 262), is not characterized as a metallic substance.

The *Kāḍiprakaraṇa* of the *Gorakṣasaṃhitā* is related to the *Kubjikāmatatantra*, the oldest MS of which dates from the eleventh century.

The *Gorakṣasaṃhitā*, its *Bhūtiprakaraṇa* included, may therefore date from about the same period, but a later date cannot be excluded with any certainty.⁸⁴

The period in which Gorakṣa lived is a disputed issue;⁸⁵ dates mentioned in the literature are: middle of the ninth century,⁸⁶ ninth or tenth century,⁸⁷ between the ninth and twelfth centuries,⁸⁸ tenth century,⁸⁹ eleventh century,⁹⁰ not later than A.D.1200, probably early in the eleventh century,⁹¹ earlier than the last quarter of the thirteenth century,⁹² thirteenth century,⁹³ and end fourteenth century.⁹⁴

Chapter 4

Kākacaṇḍeśvarīmatatantra to Rasahrdayatantra

The Kākacaṇḍeśvarīmatatantra

The *Kākacaṇḍeśvarīmatatantra*,¹ written in the form of a conversation between Śiva and Kākacaṇḍī,² deals with many subjects that belong to rasaśāstra. The work opens with a scene on the Kailāsa, where Śiva and his spouse are surrounded by a group of Yoginīs who are praising Śiva. Yoginīs mentioned by name are Krandanandī, Mahākālī, Bhṛīgacaṇḍī, Vināyaki, Kapālī, Kālarātrī, Kālacandrā, Kalāmbikā, Karālī, Kālakaṇṭhī, and Kākacaṇḍeśvarī. Kākacaṇḍī, also called Kākacāmuṇḍā, asks Śiva for instruction on alchemical subjects (2.3: dhātuvāda and rasāyana). Śiva complies with her request and expounds the science.³

The text describes⁴ some saṃskāras of mercury,⁵ the making of artificial gold and silver,⁶ abhṛakadruti,⁷ the making of artificial gems (ratnakartṭva; 2.4), etc. Some types of mūṣā,⁸ etc.,⁹ are referred to.¹⁰

The contents and the extent of the work vary in the MSS. A (*Mahā*)rasāyanavidhi¹¹ forms part of some versions. One MS contains a number of kalpas and rasayogas.¹²

It may be that the *Kākacaṇḍīśvarakalpatantra* is related to the *Kākacaṇḍeśvarīmatatantra*.¹³

The *Kākacaṇḍeśvarīmata* is referred to in the *Dattātreyaatantra*,¹⁴ the *Rasakakṣāpuṭa*, Nityanātha's *Rasaratnākara*, Rāmarāja's *Rasaratnapradīpa*, and Viṣṇudeva's *Rasarājalaṅkāra* and *Rasasindhu*. The *Kākacaṇḍīśvarītantra* is quoted in the *Pāradasaṃhitā*.¹⁵ The *Kākacaṇḍeśvara* is cited in Toḍara's *Āyurvedasaṃkhyā*¹⁶ and is one of the sources of the *Bṛhadrasarājasundara*.¹⁷

Rāmarāja's acquaintance with the work shows that it antedates the period A.D. 1400–1550. Viṣṇudeva's references to it in his *Rasarājalaṅkāra* and *Rasasindhu* establish that it is earlier than the first quarter of the fourteenth century.¹⁸

The Kākacaṇḍīśvarakalpatantra

The *Kākacaṇḍīśvarakalpatantra*,¹⁹ a treatise in about 700 verses, contains fifty-one kalpas,²⁰ generally belonging to the realm of rasaśāstra, as appears from the ingredients of the prescriptions, the effects of their administration, and the terminology used. Each kalpa consists of several prescriptions, usually with a particular plant as their main ingredient. The formulae serve to cure diseases, have a rasāyana or vājīkaraṇa character, or aim at alchemical purposes (deha- and lohasiddhi). Mantras and Tantric elements are frequent.

The plants and some other substances,²¹ after which the kalpas are named, are: aparājītā, uccaṭā, nāgadamanī, vajravallī, vajradantī, hastikarṇī, mahānīlī, śailodaka, śvetapunarṇavā, raktapalāśa, brahma(vṛkṣa), śvetapalāśa, kṛṣṇaharidrā, kaṭurohinī, aśvagandhā, aṅkola, lakṣmaṇā, īśvarī, śālmalī, kākajaiṅghā, kṣiprā, karañja, nirguṇḍī, indravāruṇī, bhṛṅgarāja, triphalā, udaka, musalī, muṇḍī, citraka, maṇḍūka, śrīphala (= bilva), āmalakī, śvetaguṇjā, maṇḍūkabrāhmī, vandā, vākucī (= somarājī), rudantī, kaṭutumbī, iliyālepa, nimba, tṛṇajyotiś, śvetārka, bhūkadamba, gandhaka, devadālī, eraṇḍa, mayūraśikhā, brahmaṇḍī, and sahadavī.²²

The only authority referred to is Nāgārjuna, to whom one of the prescriptions of the iliyālepakalpa is attributed.

The *Kākacaṇḍīśvarakalpatantra* is composed in the form of a conversation between Śiva and Pārvatī.²³ It is not clear whether it forms part of the *Kākacaṇḍeśvarīmatatantra*.²⁴

Kākacaṇḍīśvara is mentioned as a Rasasiddha in Caturbhuja's commentary on the *Rasaḥṛdaya* (1.7), the *Pāradasaṅghitā* (1.99), the *Rasaratnasamuccaya* (1.6), the *Rasatarāṅgiṇī* (1.29–32), and the *Rasendrasambhava* (introductory verses). He is a Mahāsiddha in Svātmārāma's *Haṭhayogapradīpikā* (1.7).

Kākacaṇḍeśvara is quoted in the *Pāradasaṅghitā*.²⁵ Kākacaṇḍīśvara is quoted²⁶ in the *Pīyūṣaratnamahodadhī* of Akulendranātha²⁷ and the *Rasarāja* of Viṣṇudeva.²⁸

Several verses of the *Kākacaṇḍīśvarakalpatantra* recur in the kalpa section of the *Rasārṇavakalpa* of the *Rudrayāmala*.

The date of the work is uncertain.

Special features²⁹

The uccaṭākalpa describes uccaṭā (2–3), which is also called vijayā (15), and mentions locations where this plant is found: the mountain Candrakānta, Hemapuṣṭa, the mountain Jālandhara,³⁰ Kuberanagara,³¹ the mountain Naranārāyaṇa, and Śaṅkhatīrtha³² (13–14). The vajravallīkalpa mentions that vajravallī cures the variety of udara that is called maṇḍūkākṛti. The śailodakakalpa³³ describes four varieties of śailodaka, which acts as a powerful rasāyana and turns base metals into gold. This type of action, called vedha, is obtained within specified periods of time, dependent on the location of the practitioner. Many geographical names are found in this kalpa:³⁴ Aghora, Āṅgirasakuṇḍa, Bhadrānta, Bhūśaila, Brahmagiri,³⁵ Durgadeśa, Gokarṇa,³⁶ Kalāgiri, Kalindanadī,³⁷ Kiṣkindhāparvata,³⁸ Mālyakarṇa, Mānavarta, Nṛsiṃhanagara, Pampā,³⁹ Siṃhācala,⁴⁰ Siṃhadvīpa,⁴¹ Śrīśaila,⁴² Tāreśvara, Tilodaka,⁴³ Vedaparvata, Vilānta, Vindhya, Vyāghrapāda.⁴⁴

Śailodaka owes its origin to the drops of sweat that fell from Viṣṇu's body when he, in his boar incarnation, raised the earth out of the waters.

The aṅkolakalpa describes four varieties of this plant: white, ruddy (aruṇa), yellowish (harit), and dark (kṛṣṇa). The śālmalikākalpa mentions four varieties of śālmalī: white, ruddy (aruṇa), yellowish (harit), and yellow (pīta). The plant called kṣiprā is elaborately characterized. The ratios of the ingredients in triphalā are: three niṣkas of haritāki,⁴⁵ six niṣkas of vibhītaka, and twelve niṣkas of āmalakī.⁴⁶

The udakalpa gives rules for the amount of water that should be drunk during the

various parts of day and night. The musalīkalpa gives a series of synonyms of this plant. Three varieties of muṇḍī are mentioned, white, red and dark, and two varieties of citraka, called sūcīpatramukha and maṇḍalapattraka. The maṇḍūkakalpa describes the properties of a gem-like substance in the head of a large frog living in particular places.⁴⁷

The vandākalpa describes the properties of this plant, which depend on the kind of tree on which it grows.⁴⁸ Rudantī, said to grow in mountainous regions like the Himālaya, Kailāsa, Mandara, Vindhya, Śrīśaila, Hemakūṭa⁴⁹ and Pārijāta, is described; four varieties, white, red, yellow and dark, are distinguished. The small tree called iliyālepa or kaṭveraṇḍa⁵⁰ is characterized. Four varieties of eraṇḍa are mentioned: red, yellow, dark and white. Many synonyms of mayūraśikhā are enumerated. Brahmadaṇḍī is of two varieties, white and dark.

The Kūpīpakvarasanirmānavijñāna

The *Kūpīpakvarasanirmānavijñāna* by Hariśaraṇānanda Vaidya⁵¹ is an iatrochemical treatise in Hindi and Sanskrit.⁵²

This work is of interest on account of its sources, some of which are less well known.

The sources quoted are:⁵³ *Agastasampradāyagrantha* (161), *Agastyaproktagrantha* (178), *Āyurvedaprakāśa*, *Basavarājīya*, *Bhaiṣajyaratnāvalī*, *Brhadyogatarangiṇī*, *Cikitsākramakalpavallī* (267–268; 318), *Cikitsāratnābharāṇa* (182), *Devīyāmala* (16), *Dharanīdharasamhitā* (3, 4–5, 6, 14, 80, 95), *Laghuvaidyacintāmaṇi* (181, 292, 376–377), *Nighaṇṭuratanākara*, *Nūtanakalpasaṃgraha* (169, 211–212), *Nūtanavidhi* (297), *Rasacāṇḍāṃśu* (181, 184, 238, 273–274, 351), *Rasacintāmaṇi* (207, 246, 302, 326, 327–328, 369, 372–373), *Rasacūḍāmaṇi* (370, 371), *Rasadarpaṇa* (110, 129), *Rasādhyāya* (76, 80), *Rasadīpikā* (180, 219–220, 239, 260, 288), *Rasaḥṛdaya*, *Rasaḥṛdayaṭīkā*, *Rasajñāna* (103–104), *Rasakāmadhenu*, *Rasakaṅkāliya* (185), *Rasakaumudī*, *Rasakovidā* (199), *Rasālaṃkāra* (222–223), *Rasamañjarī*, *Rasamārtanḍa* (109), *Rasapaddhati*, *Rasapaddhatiṭīkā*, *Rasapradīpa* (220–221), *Rasaprakāśasudhākara*, *Rasarājaśaṅkara* (195–196, 231, 252, 260–261, 277, 284–285, 326, 366–367), *Rasarājaśiromaṇi* (258), *Rasarājasundara* (159, 201, 242, 272–273, 306, 308, 311), *Rasaratanākara*, *Rasaratnamāṇimālā* (183, 283, 315–316, 335), *Rasaratnapradīpikā* (116, 156), *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasāgara* (228–229), *Rasasamgrahasiddhānta* (292–293), *Rasasāra*, *Rasasāroddhārapaddhati* (93), *Rasāvatāra* (190, 233, 234, 377–378), *Rasāvatāra dvitīya* (170, 202, 202–203, 203, 258, 286, 345, 352, 360), *Rasāyanasaṃgraha* (174, 206, 207–208, 208–209, 210, 216, 221, 225–226, 226–227, 231–232, 236, 249–250, 269, 274–275, 275–276, 287, 289–290, 291, 312, 313, 328–329, 333–334, 364), *Rasāyanasāra*, *Rasendracintāmaṇi*, *Rasendracūḍāmaṇi*, *Rasendrakalpadruma* (77, 155, 209, 262–263, 324, 348), *Rasendramaṅgala* (44, 45, 78, 81, 84), *Rasendrasārasaṃgraha*, *Ratnākaraśaḍhayoga* (160, 165, 174–175, 212–213, 225, 235–236, 281, 282, 288–289, 298–299, 301, 319, 336, 340, 341, 349, 365, 365–366), *Rudrayāmala* (101–102), *Śaivālabhakṣyamata* (48), *Śārṅgadharaśaṃhitā*, *Siddhabhaiṣajyaṇimāṇī*, *Siddhasampradāyagrantha* (239–240), *Ṭoḍarānanda*, *Vai-*

dyacintāmaṇi (157, 158, 176–177, 179–180, 183, 191, 218–219, 227, 233, 236–237, 237–238, 240–241, 241, 247, 249, 251, 254, 267, 271–272, 304–305, 305, 310, 324–325, 336–337), Vasāmrta (263–264), Vyāsasampradāyagrantha (194, 205, 254, 255, 256), Yogamahārṇava (164, 215–216, 315, 322, 339),⁵⁴ and Yogaratnākara.

One of the formulae was devised by the author (svanirmita; 363).

The Pāradasaṃhitā

The *Pāradasaṃhitā*, compiled by Bābū Nirañjanaprasāda Gupta,⁵⁵ is a very extensive treatise on alchemy and iatrochemistry in sixty chapters. A very large part of the work is written in Hindi, but it also contains very numerous passages in Sanskrit, quoted from diverse sources, both ancient and modern.

Works and authorities on which the *Pāradasaṃhitā* is based, according to information provided by the author himself,⁵⁶ are: *Abhidhānakāmadhenu*, *Ajīṃamañjarī*, *Bhāvaprakāśa*, *Devīyāmala*, *Dharaṇīdharasaṃhitā*, *Dhāturatnamālā*, *Gandhakakalpa*, *Gokaṇṇa*, *Kākacaṇḍīśvara*, *Kalpasāra*, *Kṣīrasindhu*, *Lohapaddhati*, *Nāgārjuna*, *Nighaṇṭurāja*, *Purandararahasya*,⁵⁷ *Rasacintāmaṇi*, *Rasadarpaṇa*, *Rasahṛdaya*, *Rasakāmadhenu*, *Rasālaṃkāra*, *Rasamañjarī*, *Rasamārtanḍa*, *Rasāmrta*, *Rasapaddhati*, *Rasapārijāta*, *Rasaprakāśa*, *Rasaprakāśasudhākara*, *Rasarahasya*, *Rasarājahaṃsa*, *Rasarājalakṣmī*, *Rasarājapaddhati*, *Rasarājaśaṃkara*, *Rasaratnadīpikā*, *Rasaratnākara*, *Rasaratnapradīpa*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasaṃketakalikā*, *Rasasāra*, *Rasasāroddhārapaddhati*, *Rasasindhu*, *Rasavāgbhaṭa*, *Rasāvatāra*, *Rasāyanasārasaṃgraha*, *Rasendracintāmaṇi*, *Rasendracūḍāmaṇi*, *Rasendrakalpadruma*, *Śāringadhara*, *Ṭoḍarānanda*, *Vaidyabhāskarodaya*, *Vaidyakalpadruma*, and *Yogatarāṅgiṇī*.

Sources of quotations are for the major part indicated by means of abbreviations which are not listed and elucidated; occasionally, the name of the source is quoted in full.

Works and authorities quoted in the *Pāradasaṃhitā* are:⁵⁸ *Anupānatarāṅgiṇī* (109),⁵⁹ *Arkaprakāśa* (47; 251), *Aṣadhikālpalātā* (147), *Āyurvedavijñāna* (233), *Bhaiṣajyaratnāvalī* (19), *Bhāvaprakāśa* (24), *Bṛhadhyogatarāṅgiṇī* (11), *Dhanvantarisaṃhitā* (111), *Dharaṇīdharasaṃhitā* (1),⁶⁰ *Dhāturatnamālā* (360), *Indrajāla* (348, 349), *Kākacaṇḍeśvara* (143), *Kākacaṇḍīśvarītantra* (257), *Kāmaratna* (26), *Nāgārjuna* (301, 349), *Nighaṇṭuratnākara* (64), *Rasadarpaṇa* (155), *Rasahṛdaya* (74), *Rasakāmadhenu* (345), *Rasamānasa* (58), *Rasamañjarī* (1), *Rasapaddhati* (131), *Rasapārijāta* (108), *Rasaprakāśasudhākara* (75), *Rasarājahaṃsa* (167), *Rasarājalakṣmī* (107), *Rasarājapaddhati* (1), *Rasarājaśaṃkara* (60), *Rasarājasundara* (490–491), *Rasaratnasamuccaya* (1), *Rasārṇava* (23), *Rasasāgara* (28),⁶¹ *Rasasāra* (66), *Rasasārapaddhati* (244), *Rasasāroddhārapaddhati* (3),⁶² *Rasāyanasārasaṃgraha* (5), *Rasendracintāmaṇi* (18), *Rasendrakalpadruma* (5), *Rasendrasārasaṃgraha* (10), *Rasēśvaradarśana* (224), *Śābdakalpadruma* (163), *Śāringadhara* (110), *Siddhalakṣmīśvaratantra* (129), *Ṭoḍarānanda* (11), *Vāgbhaṭa* (238), *Vaidyabhāskarodaya* (360), *Vaidyadarśa* (3),⁶³ *Vaidyakalpadruma* (233), *Vaidyarahasya* (340), *Vājīkaraṇakalpadruma* (263), *Yogacintāmaṇi* (233), *Yogaratnākara* (10), *Yogasāgara* (362), *Yogasāra*⁶⁴ (154), and *Yogatarāṅgiṇī* (9).

Some works in Hindī⁶⁵ and Urdū,⁶⁶ as well as a number of treatises in Persian, are quoted.⁶⁷

Nirañjana and his *Pāradasaṃhitā* are quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya* and in the *Rasatattvavivecana*; the *Pāradasaṃhitā* and some of the works on which it is based are cited in the *Āyurvedīya Khanijavijñāna*. The *Pāradasaṃhitā* was one of the sources of the *Rasavidyāmahārṇava*.

The *Pāradasaṃhitā* (1.96–106) reproduces the list of Rasasiddhas, found in the *Rasaratnasamuccaya*, but adds the following names to it: Āgama, Bālaki,⁶⁸ Bali, Bāñāsura, Bindunātha,⁶⁹ Borācolī,⁷⁰ Carpaṭa, Indradhūma, Kāmāri, Kaṇṭhaḍī, Kapila, Kāveri, Koraṇḍaka, Nirañjana,⁷¹ Nityanātha, Prabhudeva,⁷² Pūjyapāda, Ratnaghoṣa, Ratnākara, Siddhabuddha, Siddhapāda,⁷³ Subuddhi, Susenaka, Ṭiṭṭinī,⁷⁴ Vallabha, Vyālācārya,⁷⁵ and Yajanāman.

The author

The author, youngest son of Rāyabadrīprasāda, an Agravāla vaiśya, a lawyer (vakīl) by profession, was born in 1865/66. Like his father, he became a lawyer in Alīgarh. His interest in alchemy induced him to study the literature on this science assiduously and to conduct experiments himself.⁷⁶

Date

The *Pāradasaṃhitā* probably dates from the beginning of the twentieth century.⁷⁷

The Rasabhaiṣajyakalpanāvijñāna

The *Rasabhaiṣajyakalpanāvijñāna* by Saṃtoṣ Kumār Śarmā “Khāṇḍal”⁷⁸ is an elaborate work in Hindī and Sanskrit, dealing with rasaśāstra and with the preparation of āyurvedic medicines.

Contents

Volume one (Rasaśāstra) discusses many subjects belonging to iatrochemistry; volume two (bhaiṣajyakalpanā) describes the preparation of various types of āyurvedic medicines and of some particular well-known formulae.

The Sanskrit passages consist of quotations from the following works and authors: Ādhamalla, Amarakośa, Ānandakanda, Aruṇadatta, Aṣṭāṅghṛdayasaṃhitā, Aṣṭāṅgasamgraha, Ātreyaśaṃhitā, Āyurvedaprakāśa, Āyurvedīyaparibhāṣā by Gaṅgādhara, Bhaiṣajyaratnāvalī, Bhāvaprakāśa, the Bodhinīṭikā (by Āśubodha and Nityabodha Senagupta) on the *Rasaratnasamuccaya*, Cakradatta, Cakrapāṇi's commentary on the *Carakasāṃhitā*, *Carakasāṃhitā*, Ḍalhaṇa's commentary on the *Suśrutasaṃhitā*, *Dhanvantarisaṃhitā*, *Dravyaguṇavijñāna* by Yādavjī (Trikaṃjī Ācārya), *Gadanigraha*, Halāyudha, Kāśyapasaṃhitā, Kullūka's commentary on the *Manusmṛti*, *Mahābhārata*, Nārāyaṇa, *Navaparibhāṣā* by Upendranāthadāsa, *Nighaṇṭuratnākara*, *Pāradasaṃhitā*, *Purandararāhasya*, *Rājanighaṇṭu*, *Rasacintāmaṇi*, *Rasaḥṛdaya*, *Rasajalanidhi*, *Rasakāmadhenu*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasaṃketakalikā*, *Rasatarāṅgiṇī*

and its *ṭikā*, *Rasendracintāmaṇi* and a commentary on this work by Maṇirāma Śarmā, *Rasendracūḍāmaṇi*, *Rasendrasārasaṃgraha*, *Śāṅgadharaśaṃhitā*, *Siddhabheṣajama-nimālā*, *Suśrutasaṃhitā*, *Vaidyakaparibhāṣāpradīpa* (by Govindasena), *Vaijayantikośa*, *Yajurveda*, *Yogamahodadhi*,⁷⁹ *Yogarātnākara*, and *Yuktikalpataru*.

The *Rasādhyāya*

The *Rasādhyāya* by Kaṅkālayayogiśiṣya⁸⁰ is an alchemical treatise⁸¹ in 481 verses, arranged in twenty-one chapters (*adhikāra*);⁸² the text is accompanied by a Sanskrit commentary.

The *Rasādhyāya*⁸³ actually consists of a *vārttika* on the *Kaṅkālādhyāya* of Kaṅkāla (1).⁸⁴ The author declares that his work is based on the teachings of Kaṅkālayayogin, who was an expert with regard to *rasa*, *guṭī* and *añjana* (8–9).⁸⁵

The introductory verses contain two *maṅgalas*, addressed to the arhants (i.e., the Tīrthaṅkaras) (1) and to Bhairava, Bhārati (i.e., Pārvaṭī) and Vighneśa (i.e., Gaṇeśa) (10).

The subjects of the chapters⁸⁶ are: (1) the manufacture of *śṛṅghalārasa* by subjecting mercury (*rasa*) to eighteen *saṃskāras* (12–223); (2) various *rājīs* (224–242);⁸⁷ (3) *khāparaśattvapātana* (the extraction of the essence of *khāpara*; 243–249);⁸⁸ (4) *maṇaḥśīlāsattvapātana* (the extraction of the essence of *maṇaḥśīlā*; 250–253); (5) *ṣaḍlohadrutikaraṇa* (*druti* of the six metals; 254–269); (6) *ṣaḍlohamāraṇa* (killing of the six metals; 270–275); (7) *hīrakānnapathakaraṇa* (the preparation of diamonds for *jāraṇa*; 276–297ab); (8) *hīrakabhasmikaraṇa* (the preparation of the bhasman of diamonds; 297cd–320); (9) *gandhakaśoḍhana* (the purification of sulphur; 321–324); (10) *gandhakapīṭhīnirmāṇa* (the preparation of a powdered form of sulphur; 325–334); (11) *gandhakatailānirmāṇa* (the preparation of sulphur oil; 335–339); (12) *hemakaraṇa* (the making of gold; 340–357); (13) *vārigandhakaṣaḍṭipīṭhīnirmāṇa* (the preparation of a liquefied form of sulphur; 358–364); (14) and (15) *gandhakadrutipīṭhī* (the making of gold by means of liquefied sulphur, called *vārigandhaka* or *gandhakadruti*; 365–374); (16) *tālakaśoḍhana* (the purification of *tālaka*; 375–383); (17) *śuddhatālakaḥkarman* (the uses of purified *tālaka*; 384–403); (18) *abhrakadruti* (the liquefaction of mica; 404–426); (19) *abhrakadrutikarman* (the uses of liquefied mica; 427–438); (20) *hemavajrabhasmabhūnāgasattvakarmanirūpaṇa* (the preparation of a product suitable for *deha-* and *lohasiddhi* out of gold, *vajrabhasman* and the essence of *bhūnāga*; 439–458); (21) *guṭīkāñjanapārādādināṇi sevanaividhiḥ* and *bālavadīnīguṭīkānirmāṇa* (the preparation of *guṭīkāś*, *añjanas*, etc.; 459–478).

An absolute condition for success in the practice of the art is continence and chastity (*brahmacarya*) and the adherence to dietary restrictions (*haviṣyānnabhojana*) on the part of both teacher and student (11).

Chapter one describes first the seven *kañcukas*⁸⁹ and five *doṣas* of mercury (*sūta*), which have to be removed by means of various purificatory processes. The names of the seven *kañcukas* (contaminants) are:⁹⁰ *mṛṇmaya*, *pāṣāṇakañcuka*, *jala-jāta*, *kapāli*, *kālikā*, *śyāmā*, and *kāpālikā* (14); *kapāli* and *kālikā* are tin-containing (*vaṅgaja*), *śyāmā* and *kāpālikā* lead-containing (*nāgaja*) contaminants (15). The five *doṣas* are *maladoṣa*,

vahnisaṃbhava, viṣaḍoṣa, darpa, and unmatta (17–18ab).

The seven kañcukas are dangerous impurities which may cause diseases; mṛṇmaya may lead to kuṣṭha, pāṣaṇasaṃbhava to jāḍya, vārija (= jalajāta) to vātastoma,⁹¹ kapāli and kāpālikā to cilharī,⁹² kālīkā to gajacarman, dadru, pāṇḍuroga, moha, dubhita⁹³ and kāmālā, and śyāmā to śvetakuṣṭha. The five doṣas are thought to injure the tejas, to cause sattvaghāta, ghūrma,⁹⁴ aṅgasphuṭana, and unmattatā (18cd–22).

The remaining part of chapter one gives an account of eighteen saṃskāras. This series consists of pāṣasāraṇa,⁹⁵ mardana, śodhana, mūrchanotthāpana, rasapātana, rasotthāpana, svedana, niyāmana, nirodhana, mukhakarāṇa, jāraṇa, bandhana, sāraṇa, māraṇa, pratisāraṇa, krāmaṇa, vedha, and udghāṭana (26–30).⁹⁶

The procedures for these saṃskāras are described, together with the effects obtained. Pāṣasāraṇa (31) removes impurities, in particular those associated with the presence of tin or lead in crude mercury. Mardana (32–33) makes impure mercury lose its blackness. The varieties of śodhana (34–42) make mercury free from the kañcukas and doṣas.⁹⁷ Mūrchanotthāpana (43–46) renders purified mercury tejasvin, pātana (47–57ab) abolishes its subtle defects (sūkṣmadoṣa); utthāpana (57cd–69) makes it pervasive (vyāpaka) and clear (svaccha). Svedana (70–82) activates the mukhavāñchā of mercury, i.e., its ability to digest other substances, and increases its heat-resistancy; the same properties are further stimulated by niyāmana (38–89) and nirodhana (90–92).

Mukhakarāṇa or mukhaprasāraṇa (93–110), a process brought about by means of a group of niyāmika or yamika drugs, makes mercury lose its wings (pakṣacchinna)⁹⁸ and fit to assimilate other substances. Two series of these herbs and other substances are enumerated. The first series consists of amṛtā, aranyatulasī, candana, cāṅgerī, girikarṇī, kṛṣṇā, kṣīrīṇī, madhuka, matsyākṣī, meghanādā, mṛgabhojinī, punarnavā, ravimūlikā, śaṅkhinī, śarapurīkhā, sārīvā, sarpākṣī, snuḥī, tiktā, trāyantī, vajrakañculī, and vajravallī (93–96). The second series consists of adrikarṇikā, ākhuṇarṇikā, aruṣkara, bhṛṅgarāj, brahmadanḍī, brahmaghnī, ciñcika, citraka, dhattūra, the droppings of pigeons and kokilas, dvilatā, grīṣmasundara, guḍūci, haṃsapādī, haridrā, harītakī, hastiśuṇḍī, indravāruṇī, hiṅgumākṣika (an inorganic substance), kākajariṅghā, kākamācī, kañcukī, khāpara (an inorganic substance), kṣīrīṇī, kumbhī, kutumbaka, mācīkā, maṇḍūkapaṇī, mahārāṣṭrī, matsyākṣī, mṛgadūrṇā, muṇḍī, mūrvā, muśālī, nāraṅga, pāṭhālī, purīkhā, raktacitraka, saindhava, śaṅkhaṇḍikā, sarpākṣī, śatāvarī, śīgru, śikhiśikhā, somavallī, sūraṇa, svayaṃbhuj, śvetārka, śvetavarṣābhū, tilapaṇḍikā, utpala, vajrakanda, vandhyā, varṣābhū, viṣṇukrāntā, vṛścikālī, vyāghrapādī, and yakṣalocanā (97–106).

Jāraṇa (111–195)⁹⁹ makes mercury lose its capalatva (fickleness) and renders it dipṭa; several methods are described for the saṃskāra called jāraṇa; one of these renders mercury fit to digest abhraka (gaganagrāsapārada); purified abhraka and mercury are mixed and made into a compound substance; similar processes are described which make mercury digest iron, sulphur, manahśilāsattva, and khāparasattva; the way of preparing vaḍavānalaviḍa also forms part of the verses on jāraṇa; this substance, when rubbed with mercury, increases the latter's ability to digest abhraka; purified abhraka and mercury are mixed and made into a compound substance; similar processes are described which make mercury digest gold, iron, etc.; the section on jāraṇa ends with

the characterization of three varieties of this process, called garbhapara-, piṇḍa-, and pariṇāmajāraṇa. The saṃskāra called bandhana (196–206)¹⁰⁰ results in siddharasa, a substance with wonderful properties, suitable to achieve deha- and lohavedha. Sāraṇa (207–210) results in changing the baddharasa into a raktakhoṭa. Māraṇa (211–214) consists in subjecting the raktakhoṭa to intense heat, pratisāraṇa (215) in pulverizing the substance obtained by heating, and krāmaṇa (215) in mixing the powder with mṛtanāga (killed lead) and mṛtakāñcana (killed gold). Vedha (217–218) endows mercury with the ability of transforming base metals into gold. Udghāṭana (219–233) produces a substance that cures all diseases. This final product is called śrīkhalārasa.

Chapter two describes the preparation of hemarāji, (ayaḥ)prakāśarāji, ghoṣarāji (= kāṃsyaarāji), mākṣikarāji, and nāgarāji (224–242). The six lohas of chapters five and six are hemaṇa (gold), kāntaloḥa (iron), rūpya (silver), vaṇṇa (tin), nāga (lead) and tāmaṛa (copper) (260–261). The māraṇa of these six lohas is achieved by means of nāga, hiṇḡula, tilamākṣika,¹⁰¹ haritāla, manahṣilā and śuddhagandhaka respectively (270–271). The model of lohamāraṇa is tāmmāraṇa (272–275). Gandhakataila (335–339) is necessary for the making of artificial gold (hemakaraṇa, 340–357). The same applies to vārigandhakajahr̥tipīṭhī or gandhakadrutipīṭhī (358–374). Tālaka, also called godantī (375), is, after being purified, described as a medicinal substance which cures the eighteen varieties of kuṣṭha and rejuvenates the whole body (402–403). Abhrakadruti is employed for the purposes of deha- and lohasiddhi (427–438). Effects of a rasāyana type are attributed to the bhasma of gold, the bhasma of diamonds, and the essence of bhūnāgas (439–458). The rules to be observed in order to profit from the thrice eighty-four guṭikās, añjanas and mercurial preparations devised by Kaṇkālāyayogin are expounded (459–464). Finally, the preparation of bālāvādini-guṭikā is described (465–478), a pill that endows a person, if used in the prescribed way, with the knowledge of the three divisions of time.

The *Rasādhyāya* contains a large number of unusual technical terms and names of substances, the meaning of which is not always clear. Many of these terms betray the influence of the author's mother tongue, which was a form of Hindī.

Noteworthy names of plants are: āsandhi (39, commentary), bhūmimardakī (292), bīṭyā (37), brahmagnī (102), dūdhilī (43),¹⁰² hemapadī (144), hemavallī (328), jāri (144), jhījaraṭa (87), kudhya (40), mahodāka (197), mukhā ulī (317), nāhī (40), naṭī (144), pātālāgurutman (371),¹⁰³ pāṭhālī (99), svayambhuj (103), vajrakañcukī (93), vyāghramadanakodrava (404), and vyāghrapadī (103).

Noteworthy technical terms and names of inorganic substances are: agniṣṭa (314; 322),¹⁰⁴ bavvera (147), bundha (52),¹⁰⁵ bundhaka (52; 54), cātikā (385),¹⁰⁶ chāṇṭayati (300),¹⁰⁷ citrakūṭa(mṛttikā) (226), dāghīcheda (166), dāthara (321),¹⁰⁸ dhānkaṇī (198; 228),¹⁰⁹ galadghaṭī (196),¹¹⁰ ghūrmāra (382),¹¹¹ irigāla (418; 433),¹¹² jarakīśa (439), jīkaka (32; 162),¹¹³ kacūla (245),¹¹⁴ kaṇayarī (250),¹¹⁵ karṣa (323),¹¹⁶ kulhaḍī (70; 71; 72),¹¹⁷ kumpa (90; 389),¹¹⁸ kuṇḍalikā (323),¹¹⁹ mecaka (420),¹²⁰ nisāhā (280), nesahīngu (283; 285), pallikāpīṭhī (410),¹²¹ pañcamṛttikā (162),¹²² phāṇī (229; 230),¹²³ phullatūrikā (61),¹²⁴ pīṭhī (52; 326; 329; 395),¹²⁵ rāba (305),¹²⁶ rantī (325; 326), sauvarṇaka (314),¹²⁷ thauhara (299),¹²⁸ thūthā (148),¹²⁹ vaḍhavāika (280), and vedḍhaṇī (217).

The *Rasādhyāya* is quoted in Guḷrājśarmamiśra's *Viśikhānupraveśajñāna* and Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*.

A Hindī adaptation of the treatise, by a courtier of Nasīr-ud-Dīn Khalījī of Mālwa, is said to date from the beginning of the sixteenth century.¹³⁰ This *Nāsīrasāhī Kaṅkāligraṇtha*,¹³¹ written in an odd mixture of Sanskrit and Hindī, quotes Bhāskara, the *Bhāvaprakāśa*, and the *Rasapradīpa*.¹³² The quotation from the *Bhāvaprakāśa*, if genuine, would indicate that it is later than the sixteenth century.¹³³

The author

Information on the author of the *Rasādhyāya* is found at the end of the work. The author calls himself Campaka.¹³⁴ This Campaka and his brother, Manāgajākaukila, were the sons of Bhāḍiga,¹³⁵ who was a son of Mahipa¹³⁶ and a grandson of Mūñjāladeva Rāula of Yādavavaṃśa.

The *Rasādhyāya* is sometimes ascribed to a Merutuṅga, considered to be the well-known Jain author of the *Prabandhacintāmaṇi*.¹³⁷ One of the MSS credits Kaṅkālayogin with the text and Puruṣottama Sūri with the commentary.¹³⁸

The commentary on the *Rasādhyāya* is sometimes supposed to have been written by Campaka himself,¹³⁹ a view that is due to the incomplete MSS on which the edition is based.¹⁴⁰ The Berlin MS of the *Rasādhyāya* and its commentary¹⁴¹ mentions in its complete colophons Campaka as the author of the *Rasādhyāya*, and Merutuṅga, pupil of Mahendraprabha Sūri of the Añcalagaccha,¹⁴² as the author of the commentary (vṛtti). A *Rasāyanaprakaraṇa* by Merutuṅga, composed in A.D. 1387,¹⁴³ may be identical with the vṛtti on the *Rasādhyāya*.¹⁴⁴

Date

The dates of Kaṅkālayogin and Campaka are unknown.¹⁴⁵ The Berlin MS of the *Rasādhyāya* with Merutuṅga's commentary was completed in Śrīpattana in A.D. 1386/87,¹⁴⁶ which would imply that this Merutuṅga was not the author of the *Prabandhacintāmaṇi*, a work that was completed in A.D. 1306.¹⁴⁷ The Merutuṅga of the Añcalagaccha, who studied under Mahendraprabha Sūri, became a Sūri in A.D. 1472 and lived till 1527,¹⁴⁸ which conflicts with the date of the Berlin MS of the vṛtti.¹⁴⁹

The *Rasaḥṛdayatantra*

The *Rasaḥṛdayatantra* of Govinda¹⁵⁰ is an acclaimed treatise, exclusively dealing with the processing of mercury for the purposes of loha- and dehasiddhi.

Contents¹⁵¹

The *Rasaḥṛdaya* consists of 506 verses in āryā metre, arranged in nineteen chapters (avabodha).¹⁵² The titles of the chapters are: (1) rasaprasāṃsā (34 verses); (2) rasaśodhana (13 verses); (3) abhṛakacāraṇa (26 verses); (4) abhṛakasattvacāraṇa (26 verses); (5) garbhādruti (58 verses); (6) bījādijāraṇa (19 verses); (7) biḍa (9 verses); (8) rasarañjana (19 verses); (9) bījavidhāna (16 verses); (10) sattvapātana (17 verses); (11) bījanirvāhaṇa (13 verses); (12) dvandvamelana (12 verses); (13)

saṃkarabījavidhāna (8 verses); (14) saṃkarabījajāraṇa (18 verses); (15) bāhyadruti (16 verses); (16) sāraṇa (36 verses); (17) krāmaṇa (8 verses); (18) vedha (76 verses); (19) bhakṣaṇa (80 verses).

Chapter one¹⁵³ is in praise of mercury, which abolishes afflictions when mūrchita, leads to final emancipation (mukti) when subjected to bandha, and bestows immortality when mṛta (3); it even cures all diseases which are regarded as incurable (4). Those regularly using mercurial preparations acquire an immortal body (sthiradeha), the eight siddhis and the brahmapada (15).¹⁵⁴ The whole chapter consists of verses extolling the wonderful effects of mercury. The names and mythical origin of mercury are not described.

Chapter two lists the eighteen saṃskāras: svedana, mardana, mūrchā, utthāpana, pātana, nirodha, niyama, dīpana, gaganagrāsapramāṇa, cāraṇa, garbhadruti, bāhyadruti, jāraṇa, rāga, sāraṇa, krāmaṇa, vedha, and bhakṣaṇa (1–2).¹⁵⁵ One method for each of the first eight saṃskāras is described (3–11). Three naisargikadoṣas are mentioned: mala, śikhin (= agni) and viṣa, leading to mūrchā, dāha and death respectively (5). The kañcukas are not enumerated and only referred to as nāga- and vaṇgadoṣa in the verse on pātana (8); a ṣaṇḍhadoṣa is mentioned in the verse on śodhana (9). The term sṛṣṭi is explained by the commentator as consisting of the urine, semen and blood of cattle, sheep, goats or human beings (9).¹⁵⁶ Subjection to the eight saṃskāras described makes mercury suitable to the next processes (10).

Chapter three is about the process that prepares abhraka (mica) for its combination with mercury (abhrakacāraṇā); this amalgamation of mercury and mica is a prerequisite for the process called pakṣaccheda (3). The preparation of crude mica is achieved by a process called jāraṇa (4), which makes it pure and devoid of its lustre (niścandrika; 5).¹⁵⁷ Two varieties of cāraṇā are described: nirmukha- and samukhacāraṇā (5–7 and 12); samukhacāraṇā is one of the steps leading to the making of artificial gold and silver. Three other varieties, characterized by the relative quantities of mercury and mica in the mixture, are called grāsa, piṣṭī and garbha (13). A number of methods for the cāraṇā of mercury and mica are given (16–19). Verse 20 introduces sulphur (gandhaka), which is necessary for giving colour (rāgadāyin) to mercury, for the jāraṇa of a bīja, the clipping of the wings (pakṣaccheda), and the bandha of mercury. A mixture of mica and sulphur, added to mercury, results in pakṣaccheda (21–23). The addition of hemapiṣṭi (= hemabhasman) is described in the next verses (24–25).

Chapter four is concerned with the extraction of the essence (sattvacāraṇā) of mica (abhraka). Four varieties of mica are mentioned: black, red and yellow in colour and one called vajrin (1);¹⁵⁸ the extraction of the sattva of abhraka is necessary because mercury does not amalgamate with mica itself (2); the essence of mica is the best substance to achieve the pakṣaccheda of mercury (3), a process that has to precede its bandha (4). The characteristics of pakṣacchinna mercury are described (5). The variety of abhraka called vajrin is the only one suitable to the extraction of the essence (sattva) (6–7). The products called kāca, kiṭṭa and pattrarajas, resulting from sattvapātana of the unsuitable varieties of abhraka, are useless in rasāyana preparations (8). Some methods of preparing abhrakasattva (9–11) and the characteristics of this product are described (12).¹⁵⁹ Methods to mix the sattva with mercury follow (13–20). Mixtures of

abhrasattva and other substances (copper, iron, etc.), which are employed in making mercury accept the sattva, are called śulbābhra, etc. (21).¹⁶⁰ Finally, the way to colour abhrakasattva and the cāraṇa of this product are described (23–24).

Chapter five describes garbhadruti (1–35) and bāhyadruti (36–58), processes which result in the liquefaction (druti) of the grāsa, i.e., the substances added to mercury. The substances necessary to achieve this liquefaction are called bīja. Chapter five opens with methods to prepare various bījas (4–23). Mākṣikasattva, for example, is necessary for the druti of gold and silver (7). Next, garbhadruti itself is described (24–26) and the preparation of bīḍas (catalytic agents) helpful in the druti of gold and vaikrānta (27–29), followed by verses on the quantities of grāsa that can be digested by mercury, dependent on various circumstances (30–32), and related topics (33–35). The next subject is bāhyadruti; several methods are described to achieve the liquefaction of various substances.

Chapter six continues the same subject: jāraṇa of the bījas by means of druti. The characteristics of a successful jāraṇa are described (7) and the measures to be adopted when the jāraṇa is incomplete (8–10). Some definitions follow: the products called daṇḍadhārin, pāyasākāra, jalaukākāra, aviḥṣa and chedin are described (11–12);¹⁶¹ the characteristics of abhrajīrṇarasa are mentioned: dhūmra, citīcitīśabda, maṇḍūkagati, sakampa, niṣkampa (14).¹⁶² The kacchapayantra is described and jāraṇa by means of this apparatus (16–19).¹⁶³

Chapter seven is about bīḍas, which are helpful in the process of jāraṇa of the bījas, especially of hemabīja (1–3), and about the preparation and use of kṣāra for the same purpose (4–9). The trees and plants suitable for the preparation of a kṣāra are enumerated: kadālī, palāśa, tila, nicula, kanaka, suradālī, vāstuka and eraṇḍa (4).

Chapter eight is concerned with the colouring of the product resulting from jāraṇa of a grāsa. Jāraṇa of abhakra gives the product the colour of the variety of abhakra that was used (1–2). Several other methods are described. The saṃskāra by means of which colouring (rañjana or kṣṭi) is achieved is called sārāṇa. A coloured mercurial product is able to transmit its colour to various metals (18).

Chapter nine opens with the statement that mercury, even after colouring, is not yet suitable to the karman (of the alchemist, i.e., auri- and argentification); the addition of a bīja is necessary to achieve this aim (1). Two types of bīja are distinguished: yellow and white (1), employed in the making of gold and silver respectively. The substances which are of importance in preparing a bīja are enumerated; the eight rasas: vaikrānta, kānta, sasyaka, mākṣika, vimāla, adri (= śilājatu), darada and rasaka (4);¹⁶⁴ the eight uparasas: gandhaka, gairika, (manah)śilā, (harit)āla, kṣiti (= sphatikā), khacara (= kāsisa), añjana and karikuṣṭha (5); the two sārālohas: śikhin (= gold) and śaśin (= silver) (5); the six pūtilohas: tāṃra, āra, tūkṣṇa, kānta, abhrasattva, loha (= muṇḍa), vaigā and nāga; the six salts: sauvarcala, saindhava, cūlika, sāmudra, romaka and bīḍa (7); the three alkalis (kṣāra): svarjī, taṇkaṇa, and yavakṣāra (7); a group of śodhana and drāvaṇa plants: sūryāvarta, kadālī, vandhyā, koṣṭāki, suradālī, śigru, vajrakanda, nīrakaṇā (= jalappalī) and kākamācī (8). The plants mentioned are employed in the purification of the rasas and uparasas, and in the extraction of their sattva (9); the remaining part of the chapter (10–16) is about the purification of several of the substances mentioned.

Chapter ten is concerned with the extraction of the essence (*sattvapātana*) of several substances. It is necessary to extract the *sattvas* of *vaikrānta*, *kānta*, *sasyaka*, *mākṣika*, etc., because these essences can be assimilated, in contrast with the substances themselves. *Candrodaka* (2) and *śailodaka* (3) are referred to. The *sattvas* are described, together with their uses.

Chapter eleven deals with the *nirvāhaṇa* of the *bījas*, i.e., their transfer to the mercurial preparation, resulting in its colouring. *Śrīkhalābīja* is described (6–7).

Chapter twelve gives an account of the methods employed to achieve a thorough mixing of the *bīja* and the mercurial product (*dvandvamelana*).

Chapter thirteen describes the preparation of a *saṃkarabīja* (mixed *bīja*) or *mahā-bīja*, several varieties of which are distinguished. Sixty-four of these are referred to.¹⁶⁵

Chapter fourteen describes the digestion (*jāraṇa*) of these *saṃkarabījas* after adding them to the mercurial product. The *māraṇa* of mercury, leading to the product called *khoṭa*, is also dealt with.

Chapter fifteen is about *bāhyadruti* and *garbhadruti*, which serve to stabilize the product after *jāraṇa*; this stabilization is called *bandha*.

Chapter sixteen is about *sāraṇa*, a process which renders the product obtained by means of the preceding processes capable of pervading base metals added and thus transmuting them. *Sāraṇa* is achieved by means of *sāraṇataila*. The preparation of this oil is described, along with the instrument used, the *sāraṇayantra* (11–23).¹⁶⁶ *Sāraṇa* can also be carried out by means of the *ḍamarukayantra* (24–25). *Pratisāraṇā* and *anusāraṇā* are defined (30);¹⁶⁷ these varieties of *sāraṇā* increase the transmuting power (31–35).

Chapter seventeen gives an account of *krāmaṇa*, which results in the ingredients of the mixture pervading each other on an atomic level (1–2).

Chapter eighteen is about *vedha*, a process finally enabling the alchemist to transmute base metals into gold or silver (*hemākṛṣṭi* and *tārākṛṣṭi*).

Chapter nineteen describes the use of mercurial preparations for *rasāyana* purposes. The rules to be observed before the consumption of a mercurial product are given (2–15);¹⁶⁸ several mercurial products suitable to cure diseases, obtain longevity, or even render the body immortal are described (16–50). The mental state attained is described as *rasānanda* (49). The symptoms and treatment of the disorder called *rasājīrṇa* are dealt with (51–58).¹⁶⁹ Some verses extol the wonderful effects of mercurial *rasāyanas*, which make one equal to *Viṣṇu* and *Rudra* (64). The chapter ends with the recipes for *amarasundarī guṭikā* (65–66), *mṛtasamjīvanī guṭikā* (67–72), *vajriṇī guṭikā* (73–74), and *khecraguṭikā* (75–76).

The treatise ends with information on the author.

Sources are not referred to.¹⁷⁰

The *Rasaḥṛdaya* is quoted or referred to in the commentary on the *Aṣṭamahānāṭrā*, Basava's *Śivatattvaratnākara*, the *Bhāvaprakāśa*,¹⁷¹ Cūḍāmaṇimiśra's *Rasakāmadhenu*, the *Dharaṇīdharaśaṃhitā*, Govindarāma Ṭhākura's *Rasaśaṅgrahāsiddhānta*, Gulrājśarṇamiśra's commentary on the *Āyurvedaprakāśa*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānada's *Kūṭipakvarasānirmāṇavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Khare's commentary on the *Rasaratnasamu-*

ccaya, Mādhavācārya's *Sarvadarśanasamgraha*,¹⁷² Nirañjanaprasāda Gupta's *Pārada-saṃhitā*, Nityanātha's *Rasaratnākara*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, Rāmacandra's *Rasendracintāmaṇi*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Vāgbhaṭa's *Rasaratnasamuccaya*,¹⁷³ Viṣṇudeva's *Rasarājalakṣmī*, and Yādavijī Trikaṃjī's *Rasāmṛta*. The *Rasaḥṛdaya* was one of the sources of the *Āyurvedaprakāśa*, *Rasaratnasamuccaya* and *Rasendrasambhava*. A *Rasaḥṛd* is mentioned in the *Vaidyaśāstraprayavartakācāryanāmasamuccaya*.

The author of the *Rasaḥṛdaya* is quoted in Guṛājśarmamiśra's *Viśikhānupraveśavijñāna*¹⁷⁴ and Trimalla's *Brhadhyogatarangīṇī*.¹⁷⁵ Bhagavadgovinda is mentioned as a source in Viṣṇudeva's *Rasarājalakṣmī*. Govinda is quoted in Guṛājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. The author is referred to as Govinda in Khare's commentary on the *Rasaratnasamuccaya*, as (Bhagavad)govindapāda or -pādāḥ in the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasendracintāmaṇi*, the *bha-smapiṣṭiprakaṛaṇa* of the *Rasoddhāraṇa*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*, as Govindabhagavant in the *Rasendracūḍāmaṇi*, and as Govindabhagavatpāda in the commentary on the *Rasatarangīṇī* and in the *Sarvadarśanasamgraha*.

A Govinda, either the author of the *Rasaḥṛdaya* or the one who wrote the *Rasasāra*, is referred to as a source or quoted in Māṇikyadeva's *Rasaratnasamuccaya*, Rāmarāja's *Rasaratnapradīpa*, the *Rasakakṣāpuṭa*, and the *Rasakalpa*.

A Govinda, who cannot be but the author of the *Rasaḥṛdaya*, is mentioned in the *Rasasāra*.¹⁷⁶

The *Rasaratnākara* (Vādikhaṇḍa), *Rasaratnasamuccaya* and *Rasatarangīṇī* mention Govinda as one of the *Rasasiddhas*.

*The author*¹⁷⁷

The last verses of the *Rasaḥṛdaya* (19.78–80) contain some information on the author, who calls himself bhikṣu Govinda.¹⁷⁸ The author mentions as his patron king Madana,¹⁷⁹ an alchemist (*rasācārya*) himself, the lord of the *Kirātas*,¹⁸⁰ of *Somavaṃśa*¹⁸¹ and *Haihaya kula*.¹⁸² D.G. White is inclined to locate Govinda's *Haihaya* king Madana, lord of the *Kirātas*, at the eastern extremity (eastern Madhya Pradesh, Orissa) of the sphere of influence of the *Kalachuri* kings, who traced their lineage back through *Haihaya* and *Yadu* to the Moon and therefore considered themselves to belong to the Lunar dynasty (*somavaṃśa*).¹⁸³

One of the MSS has an additional verse containing the names of Govinda's father, *Maṅgalaviṣṇu*, and grandfather, *Sumanoviṣṇu*.¹⁸⁴

Bhikṣu Govinda is by some regarded as a Buddhist, by others as a Hindu.¹⁸⁵ The view that he was a Buddhist rests on very slender evidence, consisting of a reference to the *Tathāgata* in the additional verse of one of the MSS.¹⁸⁶ The references to Hinduism in the body of the text clearly indicate that Govinda was a Hindu by faith.¹⁸⁷

Date

Tryambaka Kāle identified bhikṣu Govinda with the Govindabhagavatpādācārya who was the teacher of Śaṃkarācārya.¹⁸⁸ This identification was based on the resemblance, with regard to meaning, of an āryā of the *Rasahṛdaya* (1.30) and a verse in one of the works of Śaṃkara,¹⁸⁹ and on references to the author of the *Rasahṛdaya* as Govindabhagavatpādācārya in the *Sarvadarśanasamgraha*.¹⁹⁰ Kāle's hypothesis is rejected by part of the later authors on the subject,¹⁹¹ because it would place the composition of the *Rasahṛdaya* in the last part of the eighth or the beginning of the ninth century, an age in which alchemy had not yet developed to the stage represented by the *Rasahṛdaya*.

Kāle also claimed that Govinda's patron, Madana, is identical with a king Kāmadeva, who is mentioned in the *vaṃśāvalī* of the Haihayakula;¹⁹² this king is assigned to the eighth century, which would fit in with the view that the author of the *Rasahṛdaya* and Śaṃkara's guru are one and the same person.

Kāle's assumptions regarding the identities of Govinda and Madana are arbitrary and unconvincing. The *Rasahṛdayatantra* cannot possibly date from the late eighth or early ninth century on account of the much more developed state of *rasaśāstra* in this work, compared with what is found in the works of Vṛnda, Cakrapāṇidatta and Vaṅgasena. The similarities between the *Rasahṛdaya* on the one hand and the *Rasārṇava* and *Rasendracintāmaṇi* on the other suggest that these three works were composed in about the same period.¹⁹³ D.G. White is of the opinion that the tenth or eleventh century is a plausible date for Govinda's work, in the light of the dates of later treatises that refer back to it.¹⁹⁴

The lower limit is provided by the quotations in the *Rasarājalakṣmī* (dating from the third quarter of the thirteenth century), *Rasendracūdāmaṇi*, and *Sarvadarśanasamgraha* (dating from the second half of the fourteenth century).

A commentary on the *Rasahṛdayatantra*, called *Mugdāhāvabodhinī*,¹⁹⁵ was written by Cathurbhujamiśra.¹⁹⁶

Authorities and works quoted or referred to in this commentary are: Amara (1.14; 4.24; 11.8; 12.4; 19.23, 36, 61), *Anekārtha* (1.1 and 2), Bhagavadvacana (1.23 and 25), *granthāntara* (1.29–30; 3.5; 4.1, 8, 12; 5.7; 14.2; 19.38, 44, 46, 65–66), *guror vacanam* (1.10), Haima (16.5), *Haṭhpradīpikā*¹⁹⁷ (1.21), *Hitopadeśa* (1.6), *Mādhavanidāna* (10.3), *Mañjarī* (1.1; 3.19),¹⁹⁸ *Nyāyāśāstra* (1.24), *paribhāṣā* (2.3, 4, 13; 6.19; 8.1; 9.1; 16.1; 18.1), *Praśnottararatnamālā* (1.15),¹⁹⁹ *Rasamañjarī* (1.2 and 3), *Rasaratnākara* (1.1, 2, 3, 6), *Rasasaṃketakalikā* (2.5), *Rasasāra* (2.6), *Rasāvatāra* (1.11), *Rasendramaṅgala* (1.3 and 5; 2.3 and 5), *Śaktyavatāra* (2.9), *Samketakalikā*²⁰⁰ (1.3), *śruti* (1.1 and 23), *Sūtra* (1.7 and 13),²⁰¹ *Vedāntasūtra* (1.9), *vedāntavacana* (3.28), and *Vidagdhamukhamāṇḍana* (1.3).²⁰²

Cathurbhujā gives, from an unknown source, the following list of *Rasasiddhas*: Āllama,²⁰³ Bhāluki, Bindunātha,²⁰⁴ Carpaṭī, Gaja,²⁰⁵ Ghodācolī,²⁰⁶ Kākacaṇḍīśvara, Kaṇeri,²⁰⁷ Kaṇṭhaḍī,²⁰⁸ Kāpālika, Kapālin, Khaṇḍin,²⁰⁹ Korāṇṭaka,²¹⁰ Manthāna-bhairava, Nāgadeva,²¹¹ Nirañjana,²¹² Nityanātha, Prabhudeva,²¹³ Pūjyapāda,²¹⁴ Siddhabuddha,²¹⁵ Siddhapāda,²¹⁶ Surānanda, Ṭhīṇṭhīnī,²¹⁷ and Yogin²¹⁸ (ad 1.7).²¹⁹

A long list of *vāsanaśādhis* is found in the comments ad 3.4. This list mentions:²²⁰

abhracandrā,²²¹ ahilocanā, ajamārī, alambuṣā, aparājita, apattra, brhatī, caṇakāyāsī, citraparṇī, dantī, dhānyā, garuḍī, gojihvikā, halinī, haṃsapādī, hemapuṣpikā, īsvarī, jalacakorī, jalajā utpalī, jalamūlaka, jalapippalī, jalapūrvāmbusitā,²²² jālinī, jalodbhāvāpāmārga, kapotī, kapotikī, kṣīrikā, kumārī, kumbhikā, kurkurī, lavaṇā, māṃsī, māṇḍūkī, mārjārapādikā, meghanādā, meṣikā, mīnākṣī, mohinī, mūrti, muṣalī, nāginī, nandinī, pāṣāṇabhedikā, prasāriṇī, rasacandraukasa,²²³ sārivā, sarpaśugandhikā, śikhā, śikhipādī, sitajaṅghā, sthalaajā padmā, śukanādā, svara, triparṇikā, tulasī, ugrā, upāmbu, uttamā, vajrakandaka, vanamālā, vanārjakā, varāhī,²²⁴ vāribhūtā samaṅgā,²²⁵ vāyasī, vidārī, vṛddhā, vṛścikālikā, and yavaciñcā.²²⁶

Outstanding (Rasa)siddhas referred to are Nityanātha (3.17; 5.36; 19.77) and Vīranātha (3.17).²²⁷ Nāgārjuna is mentioned as a Yogīndra (19.70).

Caturbhujā's commentary abounds in anonymous quotations.²²⁸ He mentions variants of Govinda's text²²⁹ and gives vernacular equivalents for the names of some substances.²³⁰

Jasavanta Siṃha, who wrote a Hindī commentary on the *Rasaḥṛdaya*, regards Caturbhujā as one who had no first-hand knowledge of alchemy; he highlights a number of obviously wrong interpretations.²³¹

Caturbhujā is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*. The commentary on the *Rasaḥṛdaya* is cited in Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*, Khare's commentary on the *Rasaratnasamuccaya*, and the *Rasatattvavivecana*.

Caturbhujā mentions in the introductory verses of his commentary that he was a grandson of Hariharamiśra of Kuralakula and a son of Maheśa; he was a brāhmaṇa of Khaṇḍelavāla lineage. Descendants of this lineage live in Jaypur, Bīkāner, and adjacent regions.²³²

This information proves that the commentator on the *Rasaḥṛdaya* is distinct from the Caturbhujā who was the father of Śivadatta, who wrote the *Śivakoṣa*.²³³

Caturbhujā's quotations from Cāmuṇḍa's *Rasasaṃketakālikā* and Śrīśailanātha's *Praśnottararatnamālā* indicate that he cannot be earlier than the sixteenth century.

A *Rasakalpadruma*, which may or may not be a work on rasaśāstra, is attributed to a Caturbhujā.²³⁴ A treatise called *Aṣṭādaśasaṃskārāḥ* by a Caturbhujā is classified as a work on dharmasāstra.²³⁵ Rāmānanda, the author of a ṭīkā on the Kāśīkhaṇḍa of the *Skandapurāṇa*, was a pupil of a Caturbhujā.²³⁶

Chapter 5

Rasajalanidhi

The *Rasajalanidhi* by Bhūdeva Devaśarman (Bhudeb Mōokerji)¹ is an extensive work in Sanskrit verse and prose, accompanied by an English translation, on all the aspects of alchemy and iatrochemistry.

Contents

Volume I consists of eight chapters, preceded by a maṅgala.

Chapter one (rasasādhanaśya prayojanāni; 6–17) deals with the qualifications of a teacher and his disciple, the construction of the laboratory (rasaśālā), the rasaliṅga and its worship, and the equipment (upakaraṇāni) of the laboratory. Chapter two (śiṣyopanayana; 18–26) is on the initiation of a student. Chapter three (rasaprasaṅga; 27–36) begins with a eulogy of mercury, followed by verses on the various kinds of mercury and the meaning of its names.

Chapter four (pāradaprasaṅga; 7–220) deals with the blemishes of mercury (7–8), the eighteen saṃskāras (39–40), śodhana (40–51), svedana (51–53), mardana (54–56), uddhṛti (56–57),² ūrdhvpātana (57–60), adhaḥpātana (60–61), adhaḥpātana followed by ūrdhvpātana (61–63), tiryakpātana (63), rodhana or nirodha (63–66), niyāmana (66–69), dīpana (69–71), anuvāsana (71), the plants called rasamūlikā (72–73), two easy ways of complete purification of mercury (73–75), grāsana (75–93; verses on the preparation of viḍas³ and a viḍavaṭī form part of this section), gandhakajāraṇa (94–98), abhṛakasattvajāraṇa (98–99), mūrchanā (99–126; the preparation of rasasindūra, rasakarpūra, pitarasa, kṣṇarasa, parpaṭīrasa, rasatālaka, makaradhvaja, and svarṇasindūra forms part of this section), bandhana (126–129), saṃcāraṇa (129–130), garbhadhṛti (130–132), jāraṇa (132–142; related subjects dealt with are the vajramūṣā, viḍas, and a viḍavaṭī), grāsamāna (140–141), māraṇa (142–156), bhasmīkaraṇa (156–176), the medicinal uses of mercurial ashes (bhasman) and the anupānas to be taken (176–190), a few rasayogas (190–192: vajrapañjarasa, pañcāmṛta), the regimen that precedes the taking of mercurial preparations (192–195: kṣetṛīkaraṇa), rules accompanying their use (195–205), the disorders resulting from improper use of mercury and the treatment of these disorders (205–213), niyāmaka plants (214), the plants called mūlikā (215–217), and plants and substances used in the killing (māraṇa) of mercury (217–220).

Chapter five (rasarañjana; 221–249) is concerned with the processes called rañjana (221–222), sāraṇā (222–236), saṃkrāmaṇa (236), and vedhana (237–249). Chapter six (yantrāṇi; 250–298) describes yantras and koṣṭhikās (250–285), crucibles (mūṣā; 285–

293), and *puṭaṣ* (293–298). Chapter seven (299–320) contains a series of definitions (*paribhāṣā*; 299–309), followed by verses on weights and measures (309–311). The second part of the chapter is devoted to the *bandhas* of mercury (311–320). Chapter eight (321–350) describes methods of making gold and silver; it ends with some verses on the bleaching (*śvetīkaraṇa*) of copper.

Volume II consists of four chapters, preceded by a *maṅgala*. Chapters one to three are about the *uparasas*, chapter four deals with some of the metals.

Chapter one (2–129) begins with an enumeration of the *uparasas*, divided into three groups: (a) substances to be purified and killed: *vajrābhra*, the two kinds of *mākṣika*, *vimala*, *śilājātu*, *tutthaka*, *sasyaka*, *capala*, and *rasaka*; (b) substances used in mercurial operations: *gandha*, *gairika*, *kāśīsa*, *kāṅkṣī*, *tāla*, *śilā*, *añjana*, and *kaṅkuṣṭha*; (c) substances having some properties in common with mercury and therefore called *sādhāraṇarasas*: *kampilla*, *gaurīpāṣāṇa*, *navasāraka*, *kaparda*, *vahnijāra*, *girisindūra*, *hiṅgula*, *mṛddāraśṛṅga*, and *bhūnāga*.

The subjects of chapter one are: mica (*abhraka*), its four usual varieties, its purification, the preparation of *dhānyābhra*, the killing of mica, the *aṃṭīkaraṇa* of the ashes, plants and some substances employed in the killing of mica, the medicinal uses of the ashes of mica, the extraction of the essence, its purification and killing, the softening (*mṛdūkaraṇa*) of essences, the liquefaction (*druti*) of mica, the transmutation (*vedha*) of base metals by means of mica (3–60); the varieties, purification, killing, the extraction of the essence, etc., of *mākṣika* (61–77), *vimala* (77–83), *śilājātu* (83–104), *tutthaka* (104–110), *sasyaka* (110–115), *capala* (115–118), and *rasaka* or *kharpara* (118–129).

The subjects of chapter two (130–210) are: sulphur (*gandhaka*), its varieties, purification, the uses of purified sulphur, the preparation of *gandhakataila*, the removal of the bad smell, and the transmutation of metals by means of sulphur (130–149); the varieties, purification, the extraction of the essence, and medicinal uses of *gairika* (146–149), *kāśīsa* (149–152), *kāṅkṣī* or *tuvarī* (152–154), *haritāla* (155–196), *manahśilā* (196–201), *añjana* (201–207), and *kaṅkuṣṭha* (207–210).

The subjects of chapter three (211–236) are: *kampilla* and its purification; the purification of *sādhāraṇarasas* in general (211–212); the purification, etc., of *gaurīpāṣāṇa* (213–214), *navasāra* (214–216), *varāṭikā* or *kapardī* (216–219), *śaṅkha* (219–221), *agnijāra* (221–222), *girisindūra* (222–224), *hiṅgula* (*cinnabar*) (224–233), *mṛddāraśṛṅga* (233–234), and *bhūnāgas* (234–236).

Chapter four (237–288) is concerned with gold, silver and copper. The chapter begins with an enumeration of the seven metals (*dhātu*, *loha*): gold, silver, copper, iron, zinc, tin and lead, and the three alloys (*miśraloha*): *pittala*, *kāṇṭhya* and *vartaka*. The subjects of chapter four are: the varieties and properties, purification, killing, etc., of gold (237–259), silver (259–273), and copper (273–288).

Volume III is divided into eleven chapters.

Chapter one, preceded by a *maṅgala*, is devoted to iron and *maṇḍūra* (3–95). Its subjects are: the properties of iron, its seven natural blemishes, its varieties, purifica-

tion, killing (bhānupāka, sthālīpāka, puṭapāka are also dealt with; the items of a number of gaṇas are enumerated), nirutthikaraṇa and amṛtikaraṇa of the ashes, the uses of the ashes, liquefaction of iron (3–91); maṇḍūra, its properties, varieties and uses, its purification and liquefaction (91–95).

Chapter two (96–140) is devoted to the varieties, properties, purification, killing, etc., of zinc (96–101), tin (101–120), and lead (120–140).

The subjects of chapter three (140–158) are: the three alloys, their purification and killing (140–152); triloha, its purification, killing and uses (152–153); the extraction of the essence of bhūnāga and the uses of this essence (kharasattva; 153–157).

Chapter four (159–259) is devoted to the ratnas and uparatnas (precious and semi-precious stones). Sixteen ratnas are enumerated: vajra (diamond), marakata (emerald), māṇikya (ruby), mauktika (pearl), nīlamarī (sapphire), gomeda (zircon), vaidūrya (cat's eye), dagdhahīraka or vaikrānta (garnet), sphaṭika (quartz), candrakānta (moonstone), sūryakānta (sunstone), pravāḷaka (coral), karketa (chrysoberyl), puṣparāga (topaz), rājāvarta (lapis lazuli), and bhīṣmaka (a kind of quartz); seven uparatnas are mentioned: pālāṅka (onyx), rudhira (carnelian), pūti(kā) or putrikā (peridot), tārkaṣa (turquoise), pīlu (jade), upala (opal, chalcedony and agate), and sugandhika (spinel) (159–160).

The subjects dealt with are: diamonds, their classification, characteristics, blemishes, purification, killing, etc. (163–187), the purification and killing of gems in general (188–195), marakata (196–201), māṇikya (201–209), pearls (209–217), nīla (217–220), gomeda (220–223), vaidūrya (223–226), vaikrānta (226–235), sphaṭika (235–237), candrakānta and sūryakānta (238–239), pravāḷa (240–242), karketa (242–244), puṣparāga (245–248), rājāvarta (248–251), bhīṣmaka or bhīṣmamarī (251–252), and the uparatnas (252–259).

Chapter five (260–282) deals with groups of alkaline substances (kṣāra), their sources, general properties, yavaḥkṣāra, ūṣara, miśraḥkṣāra, svarjikṣāra, ṭaṇkaṇa, the uses of kṣāra, the preparation of kṣāra, more groups of kṣāras.

Chapter six (283–291) is about salts (lavaṇa); six types are distinguished: sāmudra, saindhava, viḍa, sauvarcala, romaka, and cūlikālavaṇa.

Chapter seven (292–329) describes poisonous substances (viṣa). Ten sources of sthāvaraviṣa (poisons of vegetable origin and inorganic substances) are distinguished: roots, leaves, fruits, flowers, barks, milky juices, woods, exudates (niryāsa), tubers, and metals. The usual eighteen poisonous tubers are enumerated and described (292–303).⁴ The eight tuber poisons that may be used for medicinal purposes are divided into brāhmaṇa, kṣatriya, vaiśya and śūdra types. The disorders caused by poisonous substances and the treatment of these disorders are dealt with. The purification and killing of tuber poisons are described, followed by rules about the medicinal uses of poisonous substances. The chapter ends with poisons of animal origin, especially snake venom.

Chapter eight (330–360) gives an account of the minor poisons (upaviṣa), their purification and uses (330–351); the thirteen minor poisons (of vegetable origin) are: snuḥī, arka, lāṅgalī, guṇjā, karavīra, viṣamuṣṭi, dhattūra, jayapāla, bhallātaka, nirviṣā, ativiṣa, ahiphena, and jayā (= bhaṅgā).⁵ The second part of the chapter is concerned

with the treatment of disorders caused by upaviṣas (351–357), the purification of a number of seeds, guggulu, and leeches (357–360).

Chapter nine (361–369) is about the extraction of oil (tailapātana) from a number of seeds.

Chapter ten (370–383) describes fermented fluids (saṃdhāna), which are divided into three groups: (1) alcoholic, (2) non-alcoholic, medicated, (3) non-alcoholic and non-medicated. The first group (madya) consists of gauḍī, mādhvī, paiṣṭī, kādambarī, vāruṇī, mādhuḥkī, maireyī, and mārīvīka; the second group consists of the āsavas and ariṣṭas; the third group consists of sīdhu, śukta, dhānyāmla, kāñjika, guḍaśukta, cukra, tuṣāmbu, sauvīra, āranāla, and śiṇḍākī.

Chapter eleven (384–390) contains definitions of śulvanāga, varaloḥa, ghoṣa-krṣṭatāmra, varanāga, cullakā, patāṅgirāga, āvāpa, abhiṣeka, nirvāpa, śuddhāvarta, bijāvarta, svāṅgaśītala, and bahiḥśīta. The chapter ends with a list of thirty-seven Rasasiddhas.

Volume IV consists of six chapters, preceded by a maṅgala and prayer to the author's iṣṭadeva.

Chapter one (3–35) is about rules regarding diet and behaviour, followed by general rules about the taking of medicines, in particular rasayogas. Chapters two to six deal with a number of diseases, their aetiology, symptoms and treatment, in particular the treatment with rasas.

Volume V begins with a maṅgala again, followed by a large number of adhikāras, devoted to the aetiology, symptoms and treatment, in particular the treatment with rasas, of many diseases.

Authorities, referred to in the *Rasajalanidhi*, are: Ādima (III, 65),⁶ Bhāluki (II, 207), Brahmajyotiṣ (III, 181),⁷ Candrasena (III, 183⁸ and 245),⁹ Nandin (I, 265 and 271; II, 147), Lakṣmīśvara (II, 245),¹⁰ Rāmacandra (III, 4–5),¹¹ Śāmbhu (I, 280), Somadeva (III, 156),¹² Śukra (III, 65),¹³ and Suśruta (III, 279).

The list of thirty-seven Rasasiddhas (III, 389–390) consists of: Ādima, Ananta-devasūri,¹⁴ Bhāskara, Bhūdeva,¹⁵ Brahmā, Brahmajyotiṣ,¹⁶ Candrasena, Daṇḍin,¹⁷ Gomukha, Govinda, Hari, Indrada, Kambali, Kāpālika, Kapālin, Khaṇḍa, Lambaka, Lankeśa, Māṇḍavya, Manthānabhairava, Matta, Nāgabodhi, Nāgārjuna, Nandirāja, Naravāhana, Nityanātha,¹⁸ Rāma,¹⁹ Ratnakośa, Śāmbhu, Sāttvika, Somadeva,²⁰ Śukrācārya,²¹ Surānanda, Śūrasenaka, Vāgbhaṭa,²² Vyāḍi, and Yaśodhara.

Apart from the authorities referred to, sources are not indicated by the author. Some of the texts from which verses were borrowed are: *Rasacintāmaṇi*,²³ *Rasaratna*,²⁴ *Rasaratnākara*,²⁵ *Rasaratnasamuccaya*,²⁶ *Rasārṇava*,²⁷ *Rasasāra*,²⁸ *Rasendracintāmaṇi*,²⁹ *Rasendracūḍāmaṇi*,³⁰ and *Rasendrasārasaṅgraha*.³¹

The *Rasajalanidhi* is one of the sources of the *Rasavidyāmahārṇava*.

Hariprapanna is mentioned in Hazārīlāl Sukul's commentary on the *Rasaratna-samuccaya*.

Special features

The eighteen *saṃskāras* are: śodhana, svedana, mardana, uddhṛti, pātana, rodhana, niyāmana, dīpana, anuvāsana, grāsana, mūrchana, saṃcāraṇa, garbhadruti, jāraṇa, māraṇa, bhaṣmīkaraṇa, rañjana, and vedhana (I, 39).³² A type of vedha, added to those borrowed from the *Rasendracūḍāmaṇi* (4.107cd–111), is sparśavedha (I, 248–249).

The svedanī- and kandukayantra are regarded as identical (I, 251).³³ The same applies to the vidyādhara- and pātanāyantra (I, 251–252).³⁴ Yantras added to the series found in the *Rasaratnasamuccaya* are: khalacarīyantra (I, 268), jalayantra (I, 272–273), ṭaṅkaṇayantra (I, 279), pātālayantra (I, 279–280), tejayantra (I, 280), gaurīyantra (I, 282), cakrayantra (I, 283), nāḍikāyantra (I, 284), and vāruṇīyantra (I, 285). The hiṅgulākṣṭīyantra and valabhīyantra of the *Rasaratnasamuccaya* are absent.

Two series of plants and some other substances which are helpful in killing mica are enumerated (II, 29 and 37).

Mākṣika is said to be found along the river Tāpī, in Kirāta, Cīna and Kānyakubja (II, 61); three varieties are mentioned: svarṇamākṣika, yellow in colour, vimāla, red in colour, and tārāmākṣika, white in colour; dependent on its shape, four varieties are distinguished (II, 62–63).

A kind of copper, called nāgatāmra, can be extracted from peacock's feathers; a ring, made from this material, cures śūla and overcomes all sorts of poison (II, 108–110).

Four varieties of kāsīsa are described: (a) vālukākāsīsa, white in colour; (b) puṣpa- or padmakāsīsa, yellow in colour; (c) dhātu- or muktakāsīsa, black in colour; (d) a green variety (II, 149–150). Two varieties of kāṅkṣī, tuvarī or saurāṣṭrī are distinguished: pīṭikā and phullikā or phullatuvarī; gopīcandana is one of the names of kāṅkṣī (II, 152); the essence of tuvarī is called sphaṭikā (II, 154). Haritāla is of four kinds: pattra- and piṇḍaharītāla, godanta, vakadāla (II, 155). Maṇḥṣilā is of three kinds: śyāmāṅgī, kaṇavīrakā and khaṇḍākhyā (II, 196). Añjana is of six kinds: sauvīrāñjana, nīlāñjana, rasāñjana, srotoñjana, kulatthāñjana and puṣpāñjana (II, 201); three types of rasāñjana are distinguished (II, 203). Gaurīpāṣāṇa is also called dārumūṣaka, mūṣaka and sambala; a red, yellow and white variety are distinguished (II, 213). A varāṭī or kapardī is killed by means of an apparatus called pāṇikāyantra (II, 219). Girisindūra is regarded as an upadhātu of lead; two varieties are distinguished: girisindūra and nāgasindūra (II, 222–223).³⁵

King Rāmacandra is said to have distinguished eight kinds of iron: sāmānya, krauñca, kāliṅga, bhadrā, vajra, pañcī, nīrava and kānta (III, 4–5). The three usual types of iron are described: muṇḍa, tīkṣṇa and kānta. The three varieties of muṇḍa are mṛdu, kuṇṭha and kaḍāra (III, 6); the six varieties of tīkṣṇa are khara, sāra, hr̥nnāla, tāra-paṭṭa, vajraka and kālāluha (III, 7); the five varieties of kānta are bhrāmaka, cumbaka, karṣaka, drāvaka and romakānta (III, 14–15). Curved lines on the surface of steel are called pogara (III, 8–9). Plants helpful in the killing of iron are gaṇḍinikā (also called śālaharī, haritparṇī and martakalambukā), kuṭhāracchinna, vikaṅkata and raktamāriṣa (III, 63–64). One method of killing iron, resulting in a product called sudhāsāgaralauha, has to be continued for 4,380 days and requires the juice of 4,380 different plants (III,

70–71).

An apparatus called bhr̥ṣṭayantra is employed in one of the operations leading to the killing of lead (III, 132). Rīṭikā (brass) is of two varieties: rājarīṭikā, consisting of two parts of copper and one part of zinc, and brahmarīṭi or kākātuṇḍī, an alloy of copper, zinc, and lead (III, 141). The alloy called triloha is composed of twenty-five parts of gold, sixteen parts of silver, and ten parts of copper (III, 152).

A particular gem, called bhallāta, is said to resemble an emerald (III, 201). Three kinds of sphaṭika are described: mandakāntika (found in the Vindhyas), a black kind (found in Sri Lanka), and jyotīrasa; the last kind is of three varieties: rājāvarta, rājamaya and brahmamaya (III, 236). Upala is of three kinds: marmarāśman (chalcedony), varopala (opal) and rudhirapālaṅka (agate); a white marmarāśman is called karpūramāṇi; a black variety of upala is called bhrāmaramāṇi (III, 257–258).

Treatment with duly purified poison is said to cure the eight types of kuṣṭha; the unusual series of eight kuṣṭhas consists of puṇḍarīka, visphoṭa, śveta, audumbara, chinnabhinna, kāpālākhyā, klinnāhva and śavagandhi (III, 319).

The chapter on upaviṣas (III, 330–360) enumerates many names of the poisonous plants described; five varieties of karavīra are distinguished (III, 337) and four varieties of opium (III, 348); the resin from the flowers of hemp (i.e., hashish) is called gañjārāsa (III, 351).

A fermented fluid not known from other texts is jāli (III, 381).³⁶

The order of the diseases in volumes IV and V does not agree with any of the current arrangements.³⁷

The author and his date

The name of the author is Bhūdeva Devaśarma Mukhopādhyāya. He was a brāhmaṇa of Bhāradvājagotra, a son of Harilāla and Nistārīṇī, and was born in Bengal, in a village called Hastiśāla on the banks of the river Mayūrākṣī, in the year 1885. The author mentions Śrīharṣa, who composed the *Naiṣadhacarita*, as one of his forefathers.³⁸

Bhūdeva Mukhopādhyāya (Bhudeb Mookerjee) was a practising āyurvedic physician in Calcutta.

Chapter 6

Rasakāmadhenu to Rasāmṛta

The Rasakāmadhenu

The *Rasakāmadhenu* by Cūḍāmaṇi¹ is a compilation, based on earlier texts devoted to alchemy and iatrochemistry.

*Contents*²

The *Rasakāmadhenu* consists of four sections: upakaraṇapāda (seven chapters), dhātusaṃgrahapāda (five chapters), sūtakriyāpāda (nine chapters), and cikitsāpāda (fifty-nine chapters). Sections one to three comprise 5,566 verses, interspersed with comments in prose. The verses are borrowed from a large number of sources, mostly mentioned by name; the prose is added by the author.

The subjects of the chapters (adhikāra) of the upakaraṇapāda are: (1) the alchemical apparatus, implements, etc. (yantra; 179 verses); (2) the fire place (culhī), fuel, puṭas, weights and measures, vessels, etc. (culhyādiprakīrṇa; 73 verses); (3) plants used in alchemical operations (vanaśadhi; 138 verses); (4) major and minor poisons (viṣa and upaviṣa), substances of animal origin (jaṅgamavarga), oils (taila), various groups of substances, salts and caustics, biḍas, and rañjana (viṣajaṅgamavasāpittatāilamalamūtrakṣāralavaṇabiḍarāga; 311½ verses); (5) the preparation of bījas (bījasādhana; 141½ verses); (6) the making of mixtures (dvandvamelana), krāmaṇa and rañjana (dvandvamelakrāmaṇarañjana; 182 verses); (7) the teacher, the sādha and his female companion, the initiation (dīkṣā), the rasaliṅga and its worship, behavioural rules (ācāra) (rasasāadhanopāyakathana; 170 verses).

The subjects of the chapters of the dhātusaṃgrahapāda are: (1) the metals, their purification, killing, uses, etc. (sarvalohavidhāna; 923 verses); (2) the gems (maṇi or ratna), their purification, killing, liquefaction (druti), etc. (maṇiratnaśaṅkhavarāṭhikādividhāna; 167 verses); (3) the mahārasas, their purification, the extraction of their sattvas, their killing, etc. (mahārasāṣṭakavidhāna; 384 verses); (4) the uparasas, their purification, the extraction of their sattvas, their uses, etc. (uparasavidhāna; 273 verses); (5) salts and caustics (lavaṇakṣāra; 50 verses).

The subjects of the chapters of the sūtakriyāpāda are: (1) the names of mercury, its eulogy, origin and varieties, a mātṛmya devoted to mercury, the blemishes of mercury and the disorders caused by them (rasanāmbhedamātṛmyagunaḍoṣanirūpaṇa; 78 verses); (2) the saṃskāras, their number, short descriptions of the saṃskāras (rasasaṃskāravivekalakṣaṇasaṃkṣepakathana; 99 verses); (3) śodhana, svedana, mardana, mūrchana, pātana, nirodhana, niyamana, and dīpana (rasarājāṣṭasamṣkārakathana;

190 verses); (4) jāraṇa and related subjects (sūtajāraṇa; 372 verses); (5) additional information on the divine herbs (divyausadhi) and their uses (496^{1/2} verses); (6) jāraṇa of gems (ratna) for the purpose of rañjana (ratnādi jāraṇa; 108 verses); (7) the types of bandha (baddhajāraṇa; 692 verses); (8) the preparation of various pills (guṭikā; 210 verses); (9) sāraṇa, māraṇa, vedha, sevā (sāraṇādi; 329 verses).

The subjects of the chapters of the cikitsāpāda are: the nidāna and therapy of (1) jvara, (2) dāha, (3) tṛṣṇā, (4) mūrchā, (5) apasmāra, (6) unmāda, (7) madātyaya, (8) pāṇḍurogādi, (9) raktapitta, (10) chardi, (11) amlapitta, (12) arocaka, (13) agniroga, (14) saṃgraharī, (15) atisāra, (16) ānāha, (17) udāvarta, (18) urograha, (19) hydroga, (20) kṛmī, (21) śūla, pariṇāmaśūla, annadravaśūla, jaratpittaśūla, (22) gulma, (23) udara, (24) śotha, (25) ślīpada, (26) aṇḍavṛddhi, (27) galagaṇḍa, gaṇḍamālā, apaci, arbuda, (28) medoroga, (29) prameha and pramehapiḍakā, (30) mūtrakṛcchra, (31) mūtrāghāta and aśmarī, (32) kṣayaroga and rājayakṣman, (33) kāsa, (34) śvāsa, (35) hikkā, (36) svarabheda, (37) vātavyādhi, (38) āmavāta, (39) vātarakta, (40) kuṣṭha, (41) śītapitta, udara, koṭha (42) kodrava and masūrikā, (43) kṣudraroga, (44) śūkāroga, (45) upadaṃśa, (48) arśas, (49) bhagandara, (50) vidradhi, (51) śārīravraṇa, (52) āgantukavraṇa, (53) nāḍīvraṇa, (54) dagdhavraṇa and snāyuroga, (55) netraroga, (56) ūrdhvajatrugataroga, (57) strīroga and somaroga, (58) bālaroga, (59) viṣa, (60) sāmānyavidhivihāna.³

The last chapter deals with general subjects: the doṣas, their excitation, general remedial measures (sveda, virecana, vamaṇa, raktamokṣa, laṅghana, dhūma, nasya, vrapakrama, śāstrakarman, etc.).

The works and authorities quoted or referred to are:⁴ the author's own *Abhi-dhānakāmadhenu* (I.4.5–6, 167–172, 175cd–182ab; II.1.65cd–69ab, 162–167ab, 690–695ab; 4.4–5), also quoted as *Kāmadhenu* (II.2.1–2 and 6–7; 3.218, 261, 276, 282, 319–321ab; 4.16–17ab, 173cd–175ab, 189, 194–197ab, 239–240; 5.1–9ab; III.1.1–2), *Ajīrṇamañjarī* (I.4.166),⁵ *Ayurvedaprakāśa* (II.1.168–170; 4.241–242),⁶ Bhāluki (II.4.220), the author's own *Bhāvacintāmaṇi* (I.4.4 and 145; II.1.197–198, 666–671, 695–699, 720; 2.8 and 35–39; 3.72; 4.20, 175–176, 201–203, 211–212, 238; III.1.34–37), *Candrajñānatantra* (mantras between I.7.141 and 142),⁷ Caraka (prose between II.1.689 and 690;⁸ 3.332–333, prose between 342 and 343), Devaṇthamiśra (II.4.31–34; III.2.38),⁹ Devendragiri (I.1.69 and 157–158; 4.201cd–203ab; 5.30; 6.26–34; prose between 7.46 and 47; II.1.132–133ab and 576–580; 3.84–85; prose between III.4.39cd and 40; 7.472cd–489ab; 9.212), Devendragiri's *Rasāyanasārasaṃgraha* (I.5.136–141; II.1.256–267ab),¹⁰ *Devendragirisamgraha* (II.1.46, 498–505, 735–736; 3.67–68ab and 124–127; 4.26cd–29; III.7.32cd–36, 78–80ab, 112cd–119, 125cd–151, 249cd–252ab, 302–308; 8.55–68 and 73–117; 9.39cd–50 and 97–100ab),¹¹ *Devīyāmala* (1.66–69ab; 2.1–4; 4.311; 5.136cd; II.1.874–879; 3.149–157ab; 4.57–60ab and 230–231ab; III.2.36 and 39–47; 9.74–78),¹² *Dhānvanārīya* (II.1.98),¹³ *Goraṁśamata* (II.3.362–367), Hemacandra (prose between IV.9.242 and 243), *Kakṣāpuṭī* (III.5.316),¹⁴ *Lohapaddhati* (II.1.78–79, 668–675ab, 685–687, prose between 689 and 690, 699–702, 719, 723–724, 758–807; 3.69–71 and 80–82),¹⁵ *Lohaśāstra* (II.1.675–685ab), Manthānabhairava (I.3.54), Nāgārjuna (II.3.287), *Nighaṇṭurāja* (I.4.149),¹⁶ *Purandararāhasya* (II.3.360–361), *Rasacintāmaṇi*

(I.4.240–256ab; II.1.81–83, 109–111ab, 317–318, 320–321, 349–403, 428–456, 478–482, 495–497, 519cd–521, 533–575, 610–647, 752–754, 852–860, 911–915; 2.125–127 and 133–137; 3.162–167ab, 246cd–248, 307cd–310; 4.1.104–173ab, 218, 252–254, 273; III.3.147–150ab and 160cd–163; 4.7–20, 37–40ab, 169cd–177ab, 264–268; 7.120–122, 212ab–220, 319–363, 431–454ab; 8.37cd–49ab and 118–131ab),¹⁷ *Rasadarpaṇa* (I.1.61–62ab; II.1.101–108; 3.383; III.1.44; 3.59), *Rasaḥṛdaya* (often), *Rasālaṅkāra* (III.5.287cd–291), *Rasamañjarī* (often), *Rasamārtanḍa* (I.4.2–3ab, 83–84, 174cd–175ab, 239, 300cd–304ab; 7.45–46; II.2.31cd–35ab; 3.311–312; III.2.20–22; 3.2 and 5cd–7ab; 9.313–328), *Rasāñṛta* (II.1.4–5ab, 20, 74, 889–897ab), *Rasapaddhati* (often), *Rasapaddhatiṭikā* (often), *Rasapradīpa* (II.1.506), *Rasarahasya* (III.5.280cd–287ab), *Rasarājahaṃsa* (II.4.21–22; III.4.177cd–178ab), *Rasarājalakṣmī* (I.4.150–158ab, 191–197, 203cd–211; II.1.34–43ab; 3.2cd–4ab; prose between 3.4 and 5, 24cd–26ab, 221, 265cd–270ab; 4.3; III.1.40; 3.7cd–9ab; 4.113–139 and 312–325ab; 7.204–205), *Rasaratna* (II.1.111cd–116), *Rasaratnadīpikā* (III.3.1; 8.49cd–54), *Rasaratnākara* (often), *Rasaratnapradīpa* (II.1.518cd–519ab; III.4.198–200; 7.203), *Rasaratnapradīpikā* (I.5.21–22; II.1.918–923; 4.30; III.1.55; 3.25cd–27, 80cd–81, 103–104; 4.187cd–189ab and 211–214; 5.343–344), *Rasaratnasamuccaya* (I.1.25–29ab), *Rasārṇava* (often), *Rasasaṃketakālikā* (I.4.51–52ab, 62cd–63, 74cd–75ab, 77cd–80ab; II.1.73cd, 117–119, 171, 308–309, 314, 322–326, 465, 689, 866–870ab; 3.135 and 215; III.1.12cd–15), *Rasasāra* (often), *Rasavāgbhaṭa* (I.1.130cd–131; III.4.164cd–169ab), *Rasāyanasārasaṃgraha* (II.1.599cd–601ab; III.7.182cd–202),¹⁸ *Rasendracintāmaṇi* (often), *Rasendracūḍāmaṇi* (often), *Rudrayāmala* (III.3.165cd–185; 4.236–241), *Śaivālabhākṣya(mata)* (I.1.133–144; II.3.359), *Somadeva* (I.3.54),¹⁹ *Somanāthasaṃgraha* (II.1.344cd–347),²⁰ *Suśruta* (I.4.9; prose between 4.35 and 36; II.5.17; prose between 5.29 and 30), *Trilocana* (prose between I.2.40 and 41), *Vāgbhaṭa* (prose between II.3.342 and 343), *Vaidyakalpadruma* (II.1.472cd–477, 511cd–514ab, 885cd–888; 3.170cd–174, 233, 335cd–338ab, prose between 377 and 378; 4.69cd–72ab and 215–216), *Vaidyakalpataru* (II.1.182–184ab), and *Yāmala* (I.1.161–164; II.4.190–192ab).

Some quotations are from a source not mentioned by name.²¹ Variants of verses quoted are occasionally referred to in the comments of Cūḍāmaṇi.²²

The *Rasakāmadhenu* is, in spite of its compilatory character, an interesting and valuable work. The quotations abound in readings which may profitably be compared with those of the manuscripts and editions of the works cited.²³ The *Rasakāmadhenu* also contains numerous passages from less well-known treatises.

Particularly interesting are the quotations from the *Abhidhānakāmadhenu* and *Bhāvacināmaṇi*, written by Cūḍāmaṇi himself, and those from the *Rasāyanasārasaṃgraha* or *Devendragirisāṃgraha* by Devendragiri. The *Abhidhānakāmadhenu* is one of the sources of the *Pāradasaṃhitā*; it is quoted in one of the *pariśiṣṭas* of the *Ānandakanda*.²⁴ The *Bhāvacināmaṇi* is cited in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*. Devendragiri and his *Rasāyanasārasaṃgraha* are quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*.

The passages from the *Abhidhānakāmadhenu* show that it was an alchemical *nighaṇṭu* in verse, dealing with the origin, names and varieties of many substances employed

in alchemical operations. Distinctive features of the *Abhidhānakāmadhenu* are, for example: sixteen poisons of vegetable origin, which constitute an unusual series: viṣa, hālāhala, brahmaputra, saurāṣṭrakāhvaya, pradīpana, dāradākhyā, kākola, śauktikeyaka, ahicchattrā, meṣaśṛṅga, kuṣṭha, haimavata, pippala, pātāla, malina, and kambala (I.4.5–6); groups of kṣāras, consisting of up to ten items (4.175cd–179); twelve varieties of tīkṣṇaloha: khara, yogala or yogara, vājara, honnāla, pāraśava, sāndra, sāra, auṇḍra, kāliṅga, bhadra, pāṇḍya, and kṛṣṇāyas (II.1.690–695ab); some of the names of rasaka: jasada, caura, śīśakākāra, kharpara, kharparikā, kiṭibha, hematāraja (I.4.282); the series of uparasas: gandha, tāla, śilā, saumya,²⁵ añjana,²⁶ tuttha, abdhiphenaka, khaga (= kāsīsa), sindūra, giriṣa, khaṭī, aśman, kācamṛttikā, sphaṭikā, goja, kankuṣṭha, rājāvarta, the salts and the caustics (II.4.4–5).

The *Bhāvacināmāṇi* was concerned with the merits and defects (guṇas and doṣas) of these substances. This work also listed the items belonging to some groups of substances; an example is the viḍvarga (I.4.145).

Devendragiri's *Rasāyanasārasaṅgraha* was, as appears from the quotations, a complete alchemical treatise in verse, containing independent descriptions of many processes; Devendragiri's views deviated in some respects from those of earlier authorities.²⁷

The *Rasakāmadhenu* is quoted in the prakīrṇaka parīṣiṣṭa of the *Ānandakanda*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Āyurvedīya Khanijavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Narendranātha's *Capalanirṇaya*, incorporated in the *Rasatarāṅgiṇī*, and in the *Rasatattvavivecana*. It was one of the sources of the *Bheṣajasaṅghitā*, Devasiṁha Viṭthal's *Brhadāsavārīṣṭasāṅgraha*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, the *Pāradasaṅghitā*, *Rasadhātuprakāśa*, *Rasayogasāgara*, *Rasendrasambhava*, *Rasoddhāratāntra*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*.

Cūḍāmaṇi is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

Cūḍāmaṇi's very systematic treatise usually gives the opinions of a number of authorities on a particular subject, without making a choice. He is not even biased when quoting the views of his teacher, Devendragiri. Incidentally, he makes a personal statement.²⁸ Occasionally, he rejects statements made in particular works.²⁹

Cūḍāmaṇi adds a large number of valuable glosses to his quotations. He gives information on the uses of the yantras³⁰ and explains which terms are synonymous.³¹ Technical terms are frequently elucidated.³²

Cūḍāmaṇi's comments are concise in most cases, but, sometimes, they are elaborate and detailed.³³

The remarks on the identity of plants are useful: alaka (II.1.11: = devadālī), cakrī (I.3.24: = cakriṇīlātā and cakramarda), cāṇḍālī (I.3.23: = bhūmyāmalakī and a divyauśadhi), daṣuṇa (I.4.235: = raktaśāka), dhāvanī (III.3.59: = prṣṇiparṇī), gaṇḍanikā (II.1.760: = gaṇḍadūrvā), gartakalambukā (II.1.761: = nākulī), haritparṇī (II.1.761: = kumā-

rī, hima (II.3.115: = kaṭphala), kāmācī (II.3.188: = kākamācī), maurvī (II.3.193: = bhū-rjapattra), raktasnuhī (I.3.24: = sātalā and a climber which resembles sehunḍa), raktaś-ṅgī (I.3.24: = a variety of śāka and some climber), raktavarṇa (I.3.26: = citraka and eraṇḍa), ratnapuṣpā (I.1.139: = atasī), śālahañcī (II.1.761: = mañjiṣṭhā), smārīṇī (III.3.59: = matsyākṣī or vacā), śrgālī (III.3.59: = śālīparṇī), stokā (II.1.760: = balāmoṭā), uccaṭā (I.3.26: = śvetaguñjā and some climber), vanaka (II.1.895: = tumbaru), vanamāksika (II.1.763: = vanamadhūka), vegā (II.3.196: = jyotiṣmatī), vīrā (III.7.226: = vidārī), vra-naghnī (III.3.27: = kumārī), vyāghrī (I.3.27: = kaṇṭakārikā and some climber).

The lists of plants used in alchemical operations are quoted from several sources. Some lists are from the *Rasāmṛta* (I.3.12cd–22 and 38cd–43),³⁴ *Rasasāra* (I.3.34–36³⁵ and 3.124–138),³⁶ and *Rasendracūḍamaṇi* (I.3.54–123).³⁷ A list, quoted from an unknown source, enumerates the following plants called mūlikā: ādityabhaktā, aṅkulī, apāmārga, avākuṣpī, bhāringī, bhekaparṇī, candravallī, citraka, devadālī, eraṇḍa, gavākṣikā, goḍumbā,³⁸ gopālākarkaṭī, halinī, harikrāntā, indrā, kāṇḍavallī, karkoṭī, kokamā, kṣīrakandaka, kuḍahañcī, kuṭṭāra, mūṣakakarnī, nākulī, punarnavā, rudantī, śāṇikā, śāṅkhapuṣpikā, śarapuñkhā, śikhiśikhā, snuhī, tridhārā,³⁹ tridhāraka, ūrdhvaṣuñkhikā, vajrakanda, and vajrī (I.3.7cd–12ab).⁴⁰

The list said to be from the *Rasaratnākara* cannot be traced in that treatise;⁴¹ it consists of the following plants called rasamūlikā: adrikarṇikā, ākhukarṇikā, amṛtākanda, bhṛṅga, brahmadanḍī, bhūkanda, cakramarda, citraka, dhattūra, dūrvā, grīṣmasundara, haridrā, hastiśuṇḍī, iṣuṣuñkhikā, jayantī, jātī, kākajaṅghā, kākamācī, kañcukī, kaṭutumbikā, koṣṭakī, kṣīrīṇī, kusumbhaka, lajjālu, lāṅgalī, mahārāṣṭrī, maṇḍūkaparṇī, matsyākṣī, mūrvā, nīrakaṇā, pātālī, raktāgrariguṇḍī, rambhā, rasā-nikuśā, śairiyaka, śāṅkhapuṣpikā, sarpākṣī, śatāvarī, śigru, śikhiśikhā, śimbikā, śrīdevī, suradālīkā, sūryāvarta, śvetārka, tilaparṇikā, utpala, vajrakandā, vajralatā, vandhyā, vārāhī, and varṣābhū (I.3.1–7ab).

The arrangement of the diseases in the Cikitsāpāda is unusual and does not conform to a recognized pattern. Most of the nidāna verses of this section are from the *Mādhavanidāna*. Diseases added to those described by Mādhava are urograha (18),⁴² snāyuroga (54), and somaroga (57).⁴³

The chapter on jvara mentions several series of saṃnipāta fevers, without describing them: (1) viśphāra, śighrakārin, puṣpaṇa, vidhura, makarin, phalgu, vaidārin, karṇaka, karkoṭaka, saṃmoha, yāmya, krakaca, pālaka, kūṭapālaka (1.168–169);⁴⁴ (2) sandhiga, jihvaka, pralāpaka, tandrika, rugdāha, śitagātra, karṇaka, cittavibhrama, raktaśthīvin, kaṇṭhakubja, bhugnanetra, abhinyāsa, saṃnyāsa, hataujas (1.170–174);⁴⁵ (3) antardāha, daṇḍapāta, antaka, kumbhīpāka, prarṇunāva, pralāpin, eṇīdāha, bhūtaḥāsa, ajaghoṣa, hāridra, saṃśoṣin, yantrāpīḍa, saṃnyāsa (1.175–179).

The total number of irregular fevers (viśama-jvara) is said to be thirty-five. Apart from the well-known types, some other fevers belonging to this group are: saptāhasaṃtata, daśāhasaṃtata, dvādaśāhasaṃtata, pañcadinajvara, ṣaḍdinajvara, pralepaka, vā-tabalāsaka, ṭṭrapuṣpaka, ojonirodhajvara, and rātri- or velājvara (1.611–622).

The treatments described are not restricted to rasayogas, but comprise more traditional āyurvedic measures and prescriptions as well.

The author

Cūḍāmaṇi was a grandson of the physician Balabhadramiśra, who was a Śākadvīpiya brāhmaṇa, and a son of Hariṛāma.⁴⁶

Cūḍāmaṇi was a pupil of Devanāthamiśra; some verses from an alchemical treatise by the latter are quoted in the *Rasakāmadhenu*.

P.K. Gode⁴⁷ tentatively identified this Devanātha with the father of the Vāsudeva who wrote a commentary, called *Bhuvanacandrikā* or *Bhuvanārthacandrikā*, on Subaṇḍhu's *Vāsavadattā*.⁴⁸ Vāsudeva's references to himself as a Śākadvīpiya made P.K. Gode advance this hypothesis. The provisional identification was supported by evidence, discovered somewhat later by P.K. Gode, after studying a MS of Vāsudeva's commentary.⁴⁹ Vāsudeva, who calls his father Devanātha an eminent physician and a second Dhanvantari, refers to and quotes from a work on rasaśāstra, called *Rasamuktāvalī*, written by him.

The relationship between Cūḍāmaṇi and Devendragiri, author of the repeatedly quoted *Rasāyanasārasaṅgraha*, remains to be elucidated.

Date

Cūḍāmaṇi's chronological position can be deduced from his acquaintance with Mādhava Upādhyāya's *Āyurvedaprakāśa*.⁵⁰ His posterity to Mādhava Upādhyāya implies that he lived after the second half of the seventeenth century.⁵¹ This date is confirmed by the quotation from Kāśīnātha's *Ajīṛamañjarī*, the earliest MS of which was completed in A.D. 1617.

The *Rasakaumudī*

The *Rasakaumudī* by Jñānacandraśarman⁵² is a treatise that can be divided into an alchemical (chapters one to three) and an iatrochemical part (chapter four). The work is written in a defective language and style.⁵³

Contents

Chapter one (rasotpattiyadhikāra; 20 verses) has five introductory verses, followed by an account of the origin of mercury (1.6–20). Chapter two (rasendraśuddhyadhikāra; 30¹/₂ verses) is concerned with nine defects (doṣa) of mercury (2.3–4ab), the disorders they give rise to (2.4cd–6), and nine saṃskāras and their effects (7–30¹/₂). Chapter three (96 verses) describes the purification (śuddhi) of all the lohas and pāṣāṇas (3.1–5ab),⁵⁴ the purification of gandhaka and abhraka (3.5cd–8), sattvapātana of all the pāṣāṇas (3.9–15ab), druti of pāṣāṇa, vajra, loha and abhraka (3.15cd–21ab), mārāṇa of triloha, i.e., nāga, vaṅga and rasaka (3.21cd–23ab), mārāṇa of all the lohas (3.23cd–26), two types of mārāṇa of abhraka (3.27–31ab), mārāṇa of vajra (3.31cd–34ab), two types of mārāṇa of mercury (3.34cd–37), four varieties of rasabhasman and their medicinal properties (3.38–43), a ritual (siddhapūjavidhi) to pay homage to the eight Siddhas, nine Nāthasiddhas and their spouses, and the nine Durgās⁵⁵ (3.44–53ab), the preparation of iṣṭārthasiddhiguṭikā (3.53cd–67),⁵⁶ rasadīpana (3.68–71ab), grāsapradāna (3.71cd–78ab), rasamukhabandha (3.78cd–89), vedāmukharasa

(3.90–93), and dhūmavedhira (3.94–96). Chapter four (132 verses) describes thirteen rasayogas. The treatise ends with the formula of trailokyacināmāṇirasa.

Sources are not referred to.⁵⁷ Three formulae are attributed to Śaṃkara,⁵⁸ Ṣaṃmukha⁵⁹ and Viśvāmītra⁶⁰ respectively.

Jñānacandra's *Rasakaumudī* is one of the sources of the *Rasayogasāgara*.

Special features

The account of the origin of mercury (rasotpatti) in chapter one differs from the versions found in other texts.⁶¹ The nine doṣas of mercury described in the *Rasakaumudī* are: uḍḍīnatva,⁶² kauṭīlya, anāvarta,⁶³ saṃkara, ṣaṇḍatva, vahnīkāritva, samalatva, gurutva, and saviṣa (2.3–4ab).⁶⁴ The disorders brought about by these defects are: (1) śūla, (2) kapālaruj, (3) bhramodvega, (4) doṣasaṃcaya, (5) asaṃtāna (infertility), (6) kuṣṭha, (7) vānti, mūrchā and mahodara, (8) jāḍya and mūrchā, and (9) gātrakṣaya (2.4cd–6). The kañcukas are left unmentioned.

The nine saṃskāras, leading to a product able to bring about deha- and lohasiddhi are:⁶⁵ mardana, utthāpana, (adhaḥ)pātana, dīpana,⁶⁶ jāraṇa, sāraṇa,⁶⁷ grāsapradāna,⁶⁸ rañjana, and krāmaṇa (2.7–30¹/2). The term triloha is used to designate lead, tin and rasaka (3.21cd–23ab).⁶⁹ The second type of māraṇa of mercury (3.36–37) does not result in māraṇa, but in mūrchana.⁷⁰ Four varieties of rasabhasman are described: kṛṣṇa, pīta, śyāma and karbura in colour (3.38–41);⁷¹ these substances are medicinally valuable; the kṛṣṇa variety leads to dehasiddhi, the yellow (pīta) one removes kuṣṭha, the śyāma variety removes all the doṣas, the karbura variety has aphrodisiac properties; an added fifth variety, red in colour, abolishes the three doṣas (3.42–43). Eight lohas are referred to (4.1).

Interesting terms occurring in the *Rasakaumudī* are: aṣṭaśūla (4.46 and 74), pañcamitraka (3.17), maṇḍala (4.22, 23, 31, 100, 123, 129),⁷² raktagrahaṇī (4.66),⁷³ raktagrahiṇīkā (4.58 and 66), sindūra (4.27),⁷⁴ takrameha (4.17),⁷⁵ vajratuṇḍijantu (3.32), and vṛścikavāta (4.11).

Noteworthy plant names are: bhūdantī (4.13 and 119), bhūguṇjā (4.70), bhūśigru (4.70), dvijihvā (4.119), dvikaṇṭhikā (4.119), gorakṣikā (2.28),⁷⁶ kaḍukanda (3.11), kaṇḍūkī (3.9), kṛṣṇacitraka (4.93), kṛṣṇāmalaka (4.93), kṣīrakarṇī (3.9), kurūtīkā (3.9), mātāṅga (4.55), nīlabhṛṅgī (4.12), nīlaśṛṅgī (3.38), and śvetagandhārī (4.119).

The author

Jñānacandra was a brāhmaṇa and a son of the physician Sarvajñacandra of Candrasekhara lineage.⁷⁷

Date

The period to which the author belonged cannot be determined with accuracy. The references to the nine Nāthasiddhas and to a group of eight metals (aṣṭaloḥa) imply that it is not an early work.⁷⁸

An anonymous Rasakaumudī

An anonymous *Rasakaumudī*⁷⁹ deals with the purification of mercury, a number of

twenty-seven rasayogas⁸⁰ and how to administer them, antidotes (viśaśānti), signs pointing to health (svasthāriṣṭa) and signs pointing to a bad prognosis (ariṣṭa).

The *Rasamañjarī*

The *Rasamañjarī* by Śālinātha⁸¹ is an alchemical and iatrochemical treatise in 867 verses,⁸² arranged in twelve chapters (adhyāya).⁸³ The work is in the form of a conversation between Śiva and Pārvatī.⁸⁴

Contents⁸⁵

Chapter one (rasaśodhanaprakāra; 39 verses) deals with introductory matter (1–4), the praise of mercury (5–8), the teacher and his pupil (9–13), the names and varieties of mercury (14–15), the doṣas of mercury and the disorders arising from them (16–19), and some methods of purifying (śodhana) mercury (20–39).

Chapter two (rasajāraṇamāraṇādi; 64 verses) describes the jāraṇa of several substances by mercury (1–11), several types of māraṇa of mercury (12–16), several methods of preparing rasasindūra (17–41) and rasakarpūra (42–45), mūrchanā (46–51), bandha (52–58), and rules concerning the use of mercurial products (59–64).⁸⁶

Chapter three (uparasaśodhanamāraṇa; 101 verses) is about the uparasas (1–3ab); its subjects are the origin of sulphur (3cd–5ab), its varieties (5cd–6), the disorders caused by impure sulphur (7), its purification (8–13), the preparation of gandhakataila (14–15); the varieties, characteristics and properties of diamonds (vajra; 16–21),⁸⁷ disorders caused by impure diamonds (22), their purification (23–25ab) and māraṇa (25cd–30), the varieties, properties and māraṇa of vaikrānta (31–34), the varieties of mica (abhraka) and their properties (35–38), the preparation of dhānyābhraka (39–43ab), māraṇa of mica (43cd–56), the śodhana and māraṇa of tāla (57–61), the śodhana of manalṣīlā, rasaka, tuttha, vimala, māṁṣika, kāsīsa, kāntapāṣāṇa, varāṭikā, hiraṅga, and śīlājatu (62–83), the śodhana of the remaining uparasas (84), the preparation of bhūnāga-, vaikrānta- and abhrakasattva (85–91), the fusing (drāvaṇa) of mica (92), the extraction of various sattvas (93–96), and śodhana and māraṇa of gems (maṇi; 97–101).

Chapter four (viṣalakṣaṇasevāparihāra; 31 verses) describes eighteen plants with poisonous bulbs or tubers (kanda) (1–10), their māraṇa (11–13), the way to employ them medicinally, together with the dosages (14–21), the seven stages (vega) of intoxication (22–25), a mantra preventing intoxication (26) and the way to use it (27–28), prescriptions against poisoning (29–31).

Chapter five (svarnādyasṭadhātuśodhanamāraṇasevana; 71 verses) is concerned with the śodhana and māraṇa of the eight metals: gold (3cd–17ab), silver (17cd–24ab), copper (24cd–36), rājārīṭi (= pittala) and ghoṣa (= kāṁṣya (37), lead and tin (38–48), and iron (49–67); the medicinal properties of the products obtained are described; the chapter ends with the properties of lohakṛta (= maṇḍūra; 68–71).

Chapter six (rasayojanabhakṣaṇa; 307 verses)⁸⁸ contains formulae of rasayogas. Chapter seven (rasāyanagaṭikā; 60 verses)⁸⁹ is about rasāyana formulae. Chapter eight (netrāñjanakeśarañjana; 28 verses) is devoted to recipes against eye diseases and

premature greyness of the hair. Chapter nine (vīryastambhanādikautūhalanirūpaṇa; 78 verses)⁹⁰ describes subjects usually dealt with in Tantric treatises about śakṛman. Chapter ten (bālatantra; 32 verses) reproduces a *Bālatantra*. Chapter eleven (kālijāñña; 44 verses) is about aṣṭas. Chapter twelve (chāyāpuruṣalakṣaṇa; 12 verses) describes aṣṭas connected with one's shadow (chāyā), as taught by Śambhu.

Sources are not referred to.⁹¹ One recipe is ascribed to Nāgārjuna.⁹² A *Mālatīmata* is also mentioned.⁹³

The *Rasamañjarī* is quoted or referred to in the paribhāṣā pariśiṣṭa of the *Ānanda-kanda*, the *Āyurvedaprakāśa*, Caturbhūja's commentary on the *Rasahrdaya*, the *Dhātumāraṇa*,⁹⁴ Hariśaraṇānanda's *Kūpīpakvarasanirmāṇaviññāna*, Meghamuni's *Megha-vinoda*,⁹⁵ Nidhi's *Yogasamuccaya*, the *Pāradasaṃhitā*, *Rasakāmadhenu*, *Rasasaṃgraha-siddhānta* by Govindarāma,⁹⁶ *Rasasārāmṛta* by Rāmasena,⁹⁷ *Rasāyanasaṃgraha*,⁹⁸ *Rasayogasāgara*, *Rasendrasambhava*, *Rasendrasārasaṃgraha* by Gopālakṛṣṇa, Soma-devaśarma's commentary on the *Āyurvedaprakāśa*, the *Yogaratnākara*,⁹⁹ the *Yogata-raṅgiṇī*¹⁰⁰ and *Brhadhyogatarangiṇī*¹⁰¹ of Trimalla, and the *Sukhabodha* of Vaidyārāja.

Commentaries on the *Rasamañjarī* were written by Harinābha,¹⁰² Rāmanātha,¹⁰³ and Samaratha.

Samaratha was a Śvetāmbara Jain of the Sāgaracandrasūri branch of the Kharataragaccha, and a pupil of Matiratna or Sumatiratna. He lived in Bikāner. Samaratha's name was changed into Samayamāṇikya after his ordination. Samaratha composed his Hindī commentary on the *Rasamañjarī* in A.D. 1707. He also wrote a Sanskrit commentary on Keśavadaśa's *Rasikapriya*, composed in Brajbhāṣā; this commentary was completed in A.D. 1698.¹⁰⁴

Special features

Eight doṣas of mercury are enumerated: nāga, vaṅga, agni, cāñcalya, asahyatva, viṣa, giri and mala; the disorders they bring about are jāḍya, kuṣṭha, mahādāha, vīryanāśa, mūrchanā, mṛtyu, sphoṭa and rogapuñja (1.17–18). A second series of five doṣas, consisting of śiloccaya, mṛdbhava, atimalina, nāga and vaṅga leads to kuṣṭha, jāḍya, atyantavāta, galagaṇḍa and gulma (1.19).¹⁰⁵ The uparasas distinguished are gandhaka, vajra, vaikrānta, gagana (= abhraka), tālaka, śilā, kharpara, śikhituttha, vimalā, hemamā-kṣika, kāsisa, kāntapāṣāṇa, varāta, añjana, hiṅgula, kankuṣṭha, śaṅkha, bhūnāga, taṅka-ṇa, and śilājatu (3.1–3ab).¹⁰⁶ Four varieties of sulphur (gandhaka) are mentioned: red, yellow, white and black, useful for making gold (hemakriyā), for rasāyana purposes and in ointments on ulcers respectively; the black variety is the best one (3.5–6). Diamonds (vajra) are white, red, yellow and black; these varieties are called brāhṃaṇa, kṣatriya, vaiśya and sūdra; they are suitable to rasāyana purposes, to curing diseases, to vāda (i.e., alchemy) and to vāyāṣṭambha (i.e., rasāyana) purposes; diamonds are also male, female or neuter and fit for vedha and rasabandha, dehasiddhi, and krāma-ṇa (3.16–21). Eight types of vaikrānta are mentioned: white, red, yellow, blue, grey (pārāvataccavi), śyāmala, black, and karbura (3.32).¹⁰⁷

The usual four varieties of mica (abhraka) are enumerated: pināka, dardura, nāga and vajra (3.35). Poisonous plants are eighteen in number: kālākūṭa, mayūrākhyā,

binduka, saktuka, vāluka, vatsanābha, śaṅkhanābha, sumaṅgala, śrīṅgī, markāṭaka, musta, kardama, puṣkara, śikhī, hāridra, harita, cakra, and hālāhala (4.1–3ab). Eight stages of poisoning are distinguished, characterized by udvega, vepathu, ghoradāha, patana, phena, vikalatā, jadatā, and mṛtyu (death) (4.23–25).

Chapter five does not mention zinc as one of the metals.

The majority of the formulae of chapter six are well known and found in many rasaśāstra texts. Some of them may be rare or even restricted to the *Rasamañjarī*.¹⁰⁸

The rasāyana formulae of chapter seven are partly frequent, partly rare or peculiar to the author of the *Rasamañjarī*.¹⁰⁹

Chapter nine is a collection of prescriptions; they are meant to prevent or delay ejaculation (vīryastambha; 1–11), to increase the size of the penis (12), to cause impotence (13–15), to cure it (16–17), to increase potency (21–24), and to cure a series of diseases (25–29). The remaining part of the chapter contains recipes that ensure impregnation (30), that are suitable to vaśīkaraṇa (31–37ab), to tightening of the vagina (37c–f), removal of the pubic hair (38–39), etc. (40–78).

Chapter ten contains a *Bālatantra*, related to Rāvaṇa's *Kumāratantra* and other such texts.¹¹⁰ It enumerates sixteen Yoginīs who attack a child on the first day, month or year of its life, the second day, etc., up to the sixteenth. The symptoms of the illnesses are mentioned, together with the rituals that are appropriate to appease the beings causing them.

The names of these malignant beings are: Nandā, Āryā, Pūtanā, Bhīṣaṇāsyā, Biḍālī, Śakunī, Śuṣkā, Jṛṃbhikā, Acintyā, Kāpālikā, Lipsitā (or Nandikā), Pitalī, Bhadrakālī, Tārā, Śarvarī (or Sumukhī), and Kumārī.

Some noteworthy terms employed in the *Rasamañjarī* are āgala (2.26), pāṣā-ṇapaṭikā (2.25),¹¹¹ and sphaṭikī (2.24).¹¹²

The eight kakāras consist of kūṣmāṇḍa, karkaṭī, kalinga, kāravellaka, kusumbhika, karkoṭī, kadālī, and kākamācīkā (2.59–60).

The author

Śālinātha was a son of Vaidyanātha.¹¹³

Date

The earliest MS of the *Rasamañjarī* was completed in A.D. 1546/47,¹¹⁴ which indicates that the *Rasamañjarī* is earlier than the middle of the sixteenth century.¹¹⁵ The reference to the author of the *Rasamañjarī* in Gopālakṛṣṇa's *Rasendrasārasaṃgraha* makes it possible to push back the terminus ante quem to a period anterior to the last quarter of the fifteenth century. The upper limit cannot be ascertained.¹¹⁶

The Rasamitra

The *Rasamitra* by Tryambakanātha Śarmā¹¹⁷ is a treatise that lays emphasis on the medicinal uses of alchemical products.

Contents

The *Rasamitra* is a work in six chapters (raśmi), dealing with generalities and technical terms (1), mercury (2), the mahārasas and uparasas (3), the dhātus (4), the ratnas and uparatnas (5), the viṣas and upaviṣas (6).

Chapter one (sāmānyavijñānīya) describes, after a maṅgala to Śiva and some introductory verses, the subjects of rasaśāstra, the teacher and his student, the laboratory (rasaśālā; 4–6), technical terms (paribhāṣā; 7–12), weights and measures (parimāṇa; 13–14),¹¹⁸ the yantras (15–24),¹¹⁹ and the puṭas (24–28).¹²⁰ Chapter two (rasavijñānīya) gives an account of mercury and its doṣas (29–35), its purification (36–37), the first eight saṁskāras (37–44), the preparation of mercury from cinnabar (44), jāraṇā and mūrchanā (44–46), the preparation of mugdharasa, rasapuṣpa and rasakarpūra (47–48), some formulae (49–56),¹²¹ and some rules concerning the use of mercurial medicines (57–58). Chapter three (uparasavijñānīya) is about the mahārasas, their names, characteristics, purification, sometimes their killing, the properties and actions of the products obtained, their uses, dangers involved in their use, and the treatment of disorders caused by the use of impure products (59–84); the second part of the chapter (84–95) is devoted to a description of the uparasas, their purification and the neutralization of the effects of impurities; the third and last part is about the sādharmaṇarasas (95–105). Chapter four (dhātuvijñānīya; 106–130) is concerned with the dhātus, their purification, killing, and the medicinal properties of the products obtained. Chapter five (ratnoparatnavijñānīya; 131–177) gives a similar exposition on the ratnas, uparatnas and some other stones. Chapter six (viṣopaviṣavijñānīya) describes the viṣas, their purification, and their uses in medicine (178–208); the second part of the chapter is about the upaviṣas (208–244) and animal poisons, their purification and their uses (245–248).

Sources referred to in the Sanskrit text are the *Rasaratnasamuccaya* (209), *Rasa-saṅketakalikā* (208), *Rasasāra* (281), and *Rasendracūḍāmaṇi* (282).

Special features

Twelve doṣas of mercury are distinguished: three naisargikadoṣas (natural blemishes): viṣa, vahnī, mala; two yaugikadoṣas (adulterants): nāga (lead) and vaṅga (tin); seven aupādhikadoṣas or kañcukas (blemishes due to the environment): parpaṭī (bhūmijā), pātālī (giri-jā), bhedī (vārijā), drāvī and malakarī (nāga-jā), andhakārī and dhvāṅkṣī (vaṅga-jā) (29–35). The eight saṁskāras described are svedana, mardana, mūrchanā, utthāpana, pātana, bodhana, niyāmana, and dīpana (37–44). Six types of mūrchanā are mentioned (46).¹²²

The group of mahārasas consists of abhṛaka, vaikrānta, māksika, vimala, adrija (= śilājatu), sasyaka, capala, and rasaka (59).¹²³ The group of uparasas is composed of gandhaka, gairika, kāśīsa, kāṅkṣī (= tuvarī), (hari)tāla, (manaḥ)śilā, añjana, and kaṅkuṣṭha (84). The group of sādharmaṇarasas is made up of kampilla, gauripāṣāṇa, navasā-dara, kaparda, vahnijāra (= agnijāra), girisindūra, hīṅgula, and mṛddāraśṅga (95). The seven dhātus are gold, silver, copper, iron, zinc, tin and lead (106); three alloys are mentioned: pittala, kāṁṣya and varta (106). Three varieties of iron are referred to: muṇḍa, tṛkṣṇa and kānta (117).

Nine gems (ratna) are described: māṇikya (ruby), muktā (pearl), vidrūma (coral),

tārṅśya (emerald), puṣpa (topaz), bhidura (diamond), nīla (sapphire), gomedaka (zircon), and vidūraka (cat's eye) (131). The six minor gems (uparatna or kṣudraratna) are: vaikrānta (Irish diamond), sūryakānta (sunstone), candrakānta (moonstone), nṛpopala (lapis lazuli), peroja (turquoise), and sphaṭika (rock crystal) (157). Other stones and substances described are: vyomāśman or saṅgayaśava (jade), pālaṅka (onyx), rudhira (carnelian), pūṭikā (peridot), sugandhika (spinel), turmulī (tourmaline), tṛṇakānta (amber), sudhā (calcium), khaṭikā (chalk), dugdhapāśāṇa (talc), godantī (gypsum), śṛṅga (horn), kauśeyāśman (asbestos), nāgāśman (serpentine), and badarāśman or āśma-bhid (a calcium silicate) (163–177).

The chapter on poisons mentions five mahāviṣas: saktuka, kālākūṭa, sitamusta, śṛṅgī, and kṛṣṇaviṣa (181); series of viṣas from another treatise, from the *Rasasāra*, and from the *Rasendracūḍamaṇi* are quoted (181–182). Vegetable poisons described are: saktuka, mustaka, śṛṅgī, saikata, sarṣapa, kūrma, dārvika, vatsanābha, kālākūṭa, meṣa-śṛṅgī, hālāhala, dārdura, karkoṭa, mūlaka, granthi, hāridra, raktaśṛṅgī, and pradīpana (183–192). The substances belonging to the group of upaviṣas are quoted from the *Rasamketakalikā*, some other treatise, and the *Rasaratnasamuccaya*. The author of the *Rasamitra* distinguishes the following upaviṣas: jayapāla, arka, dhattūra, viṣatinduka, guṇjā, seuṇḍa, lāṅgalī, karavīra, ahiphena, vijayā, and bhallātaka oil (209); these poisonous substances are described; tridhārā (210) and nīlinī (237–238) are added.

The author and the date of the work

The *Rasamitra* is a twentieth-century work written by the author when he was a reader in Dravyaguṇa of the Banāras Hindu University.

Rasāmṛta

Rasāmṛta by Vaidya Yādavjī Trikamjī Ācārya.¹²⁴

*Contents*¹²⁵

This modern compilation consists of nine chapters (adhyāya) and nine appendices (pariśiṣṭa).

Chapter one (rasavijñānīya; 58 verses) gives an account of mercury, its impurities (doṣa),¹²⁶ eight saṃskāras, the preparation of mercury from cinnabar (hiṅgula), some rasayogas, cinnabar, and girisindūra.¹²⁷ Chapter two (gandhakavijñānīya; 5 verses) describes sulphur, its purification, and a recipe. Chapter three (lohavijñānīya; 186 verses) is about the dhātus:¹²⁸ suvarṇa (gold; 1–24), rajata (silver; 25–34ab), tāmra (copper; 34cd–47), pītala (brass; 48–53), kāmśya (bronze; 54–56), mākṣīka (57–72ab), tuttha (72cd–82), nīlakalka (in Hindī),¹²⁹ vaṅga (tin; 83–101ab), nāga (lead; 101cd–108ab), sindūra (108cd–109), mṛddāraśṛṅga (110–112), safedā (in Hindī),¹³⁰ sauvīrāñjana (113–115ab), yaśada (zinc; 115cd–120ab), puṣpāñjana (120cd–121), rasaka (122–128), loha (iron; 129–147) and maṇḍūra (148–151ab), vimala (151cd–156), kāśīśa (157–164ab), gairika (164cd–168), gile armanī (in Hindī),¹³¹ gile makhtūm (in Hindī),¹³² abhraka (169–182ab), and ayaskānta (182cd–186). Chapter four (mallavijñānīya; 15 verses) is concerned with malla or gaurīpāśāṇa

(1–4ab), haritāla (4cd–11), and manahṣilā (12–15). Chapter five (sudhāvijñānīya; 9 verses) describes sudhā (1–4ab),¹³³ khaṭikā (4cd–5ab),¹³⁴ godantī (5cd–9),¹³⁵ and safed surmā (in Hindī).¹³⁶ Chapter six (sikatāvijñānīya; 5 verses) is about sikatā (1–4), dugdhapāṣāṇa (5),¹³⁷ kauṣeyāśman,¹³⁸ nāgapāṣāṇa,¹³⁹ and āsmabhid (in Hindī).¹⁴⁰ Chapter seven (lavaṇakṣāravijñānīya; 28 verses) is devoted to salts (1–17: saindhava, sāmudra, romaka, viḍa, sauvarcala, and audbhida lavaṇa) and alkalis (18–28: yavakṣāra, svarjikā, ṭaṅkaṇa, sphaṭikā,¹⁴¹ parpaṭakṣāra¹⁴² and saurakṣāra).¹⁴³ Chapter eight (ratnavijñānīya; 24 verses) is concerned with the ratnas: māṇikyā (1), nīla (2), puṣparāga (3), gomeda (4), vaiḍūrya (5), tārksya (6), and vajra (7–9), their purification and killing (10–12), and the uparatnas: rājāvarta (13–15), saṅgayaśab¹⁴⁴ (in Hindī), akīka (16),¹⁴⁵ sphaṭika (17), sūryakānta (18), candrakānta (19), peroja (20),¹⁴⁶ vaikrānta (21–24), and tṛṇakāntamaṇi¹⁴⁷ (in Hindī). Chapter nine (rasayogavijñānīyayoga; 222 verses) consists of sixty-six formulae.¹⁴⁸ The pariśiṣṭas are about the preparation of bhasman and about puṭa (1; in Hindī), about capala (2), śilājatu (3), māksika and vimala (4; in Hindī), rasāñjana (5; in Hindī), the doṣas of impure dhātus (6), sattvapātana (7), and the purification of some viṣas (8). The last pariśiṣṭa (9) consists of a list of substances which are important in rasāśāstra and mentioned in the *Caraka-* and *Suśrutasaṃhitā* (references are given).

The *Rasāmṛta* is restricted to iatrochemistry, which explains that only the first eight saṃskāras of mercury are dealt with. Anuvāsana is omitted.

The sources are listed in the author's prastāvanā and often indicated in the text of the treatise.

These sources consist of: *Aṣṭāṅgasamgraha*, *Āyurvedaparakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāratiyarasaśāstra* by Vāman Gaṇeś Desāi,¹⁴⁹ *Carakasamhitā*, *Lohasarasvasa*, *Paribhāṣākhaṇḍa*,¹⁵⁰ *Rasaḥṛdaya*, *Rasapaddhati*, *Rasaparakāśasudhākara*, *Rasaratnasamuccaya*, *Rasasāra*, *Rasatarāṅgiṇī*, *Rasendracūḍāmaṇi*, *Rasendrasārasamgraha*, *Ratnapradīpa* by Mahādeva Lakṣmaṇa Khāṃbeṭe,¹⁵¹ *Suśrutasaṃhitā*, *Yogaratanākara*, and *Yūnānī Dravyaguṇavijñāna* by Dājñi Siṃha.¹⁵²

Sources not listed by the author, but referred to in his treatise, are: *Bhāvaprakāśa* (6.2ab), *Dhanvantariyanighaṇṭu* (6.1; 7.4–5ab and 20), *Gadanigraha* (6.2cd–4), *Rājanighaṇṭu* (3.166cd–167ab; 7.6cd–7ab), *Rasārṇava* (3.64cd–65ab, 122cd–123), *Rasasaṃketakalikā* (9.55–56), *Śāringadharasaṃhitā* (9.151–158ab), *Siddhabhaiṣajyamāñjūṣā* (9.132–134), *Siddhabheṣajamaṇimālā* (1.46; 4.8; 8.16; 9.183–185), and *Vaidyājīvana* (9.167).

The *Rasāmṛta* is quoted in the commentaries on the *Āyurvedaparakāśa* of Guḷrā-jśarmamiśra and Somadevaśarman; it is one of the sources of the *Bheṣajasaṃhitā*.

Chapter 7

Rasapaddhati to Rasaratnadīpikā

Rasapaddhati

The *Rasapaddhati* by Bindu¹ is a short work in 231 verses² on alchemy and iatrochemistry.

*Contents*³

The *Rasapaddhati* can conveniently be divided into two sections: 12–132, devoted to alchemy, and 133–231, devoted to formulae against diseases.

The maṅgala is addressed to Śiva as Ardhanaṛīṇateśvara.⁴ Three systems of therapy are distinguished, hierarchically arranged: daivī cikitsā, the superior system, which employs well-prepared rasas; mānavī cikitsā, treatment by means of vegetable preparations; āsurī cikitsā, the inferior method, making use of surgical procedures (2–3).⁵ The seven doṣas of mercury are enumerated: nāga, vaṅga, viṣa, mala, capalatā, vahnija, and giriṇja, and the disorders caused by them (4). The eight saṃskāras which are necessary for medical purposes are listed (5) and described (6–14), followed by some alternatives for those without the means to carry them out (15–17). The preparation of mercury from cinnabar is discussed (18).

Subjects dealt with in the next verses are: the purification of the metals (loha; 19–20); the preparation of the bhasman of gold (21–23ab), silver (23cd), iron (24–25), copper (26–30), lead (31–32ab), tin (32cd–34), and the alloys (35); the medicinal properties of these bhasmans (36–37). Verses 38–54 are about the six mahārasas: vaikrānta, gagana (= abhṛaka), śilāja (= śilājatu), capala, tāpīja (= vimalā and mā-kṣika), and tuttha. Verses 55–58 are concerned with the uparasas: gandha, (hari)tāla and manahśilā. The saṃskāras which are necessary for vedha (transmutation) are described in verses 59–60ab (jāraṇā), 60cd–62ab (cāraṇā), 62cd–63 (sāraṇā), 64–66 (mukhabandha), and 67–74 (krāmaṇa and vedha). Verses 75–79 deal with the processes to which mercury obtained from cinnabar has to be subjected in order to attain vedha, verses 80–82 with mukhakarāṇa by means of jāraṇā of sulphur, verses 83–87 with ways of preparing rasasindūra and rasakarpūra.

Relatively much attention is given to the gems (88–132). Nine gems are enumerated: vajra, vidruma, mauktika, marakata, vaidūrya, gomedaka, māṇikya, harinīla, and puṣpadīpa (= puṣparāga) (88); their connections with the nine grahas are explained (89–90). The origin of diamonds is described (91–95), their varieties are dealt with (96–99ab), their blemishes (99cd–102), their properties (103), the regions where they are found (104),⁶ their weights and prices (105–112),⁷ and their examination (113–

116). Pearls (mauktika) and their varieties are elaborately described (117–132); eight types are distinguished, originating respectively from elephants (karin), boars (kiri), bamboos (tvaksāra), fishes (matsya), clouds (ambumuc), shells (kambu), serpents (urogati), and oysters (śukti).⁸

Verses on the treatment of raktapitta (133–137ab), kāsa, śvāsa and hikkā (137cd–139), rājayakṣman (140–147ab), and some other diseases (147cd–149) follow. The last part of the treatise (150–231) contains formulae of rasayogas, mainly to be prescribed against fevers.

Sources are not referred to.

Authorities mentioned are: Agastya (147), Ātreyaśūri (193),⁹ Bhāluki (54),¹⁰ Candraśikhara (199),¹¹ Nāgārjuna (155),¹² Vasiṣṭha (147), and Viṣṇu (160).¹³

The *Rasapaddhati* is quoted or referred to in the paribhāṣā parīṣiṣṭa of the *Ānanda-kanda*, *Āyurvedābhdhisāra*, *Āyurvedaprakāśa*, *Bṛhadrasarājasundara*, *Dhātumāraṇa*,¹⁴ *Gulrājśarmamiśra*'s commentary on the *Āyurvedaprakāśa*, *Harīśaraṇānanda*'s *Kūpī-pakvarasanirmāṇavijñāna*, *Hazārīlāl Sukul*'s commentary on the *Rasaratnasamuccaya*, *Pāradasaṃhitā*, *Rasakāmadhenu*, *Rasasiddhiprakāśa*,¹⁵ the commentary on the *Rasata-raṅgiṇī*, *Rasatattvavivēcana*, *Rasavidyāmahārṇava*, *Rasayogasāgara*, *Rasendrapurāṇa*, *Somadevaśārman*'s commentary on the *Āyurvedaprakāśa*, and *Yādavjī Trikaṃjī*'s *Ras-sāṃhitā*.

Bindu is quoted in *Hazārīlāl Sukul*'s commentary on the *Rasaratnasamuccaya*. The *Rasapaddhatikṛt* is quoted in the commentary on the *Āyurvedābhdhisāra*.

Special features

Anuvāsana is not described as a separate saṃskāra.¹⁶

The metals enumerated are gold, silver, iron, copper, lead (uraga), tin (raṅga), ghana (= kāmśya), vartula,¹⁷ and ghoṣa;¹⁸ the last three items of this series are called upaloha; iron is of three types: kānta, tīkṣṇa and muṇḍa (19). Zinc is not mentioned.¹⁹ The term dhātu is not employed for the metals.

The mahārasas are only six in number (38); the inclusion of capala and tuttha is noteworthy. *Vaīkrānta* is of seven types, but only the black variety, used in alchemical operations, is taken into consideration (38).²⁰ The usual four varieties of mica are described (40). *Śilājatu* is of two types: *acalodbhūta*²¹ and *uṣodbhava*²² (44). *Capala* is of four varieties: white, black, yellow and red (46).²³ *Tāpīja* is of two types: *vimala*²⁴ and *mākṣika*. *Vimala* is of three varieties: *hema-*, *tāra-* and *kāmśyavimala*²⁵ (48). *Mākṣika* is of two varieties: *svarṇa-* and *rajaṭamākṣika*; some are said to distinguish a third variety, called *kāmśyamākṣika* (49). *Tuttha* is of two varieties: *mayūra-* and *kharparatuttha* (51). The *uparasas* are only three in number: *gandhaka*, *haritāla* and *maṇaḥśilā* (55). Three varieties of sulphur (*gandhaka*) are described: yellow, red and white;²⁶ the white variety is sometimes called *khaṭī*;²⁷ names of the yellow variety are *āmalakacchavi*, *dr̥ṣadgandhaka* and *lavaṇjaka* (55). The two usual varieties of *haritāla* are mentioned: *patrin* and *piṇḍa* (57). *Maṇaḥśilā* is of two varieties: *śyāmāṅgī* and *kaṇavīrikā* (58).²⁸

The list of saṃskāras necessary to achieve *vedha* is short (59–74); *mukhabandha* is regarded as a distinct saṃskāra; the two types of *druti* are not mentioned.

The five blemishes of diamonds are: *bindu*, *kākapada*, *yava*, *mala* and *rekḥā*

(99–102ab).²⁹ Eight regions are mentioned where diamond mines (khani) are or were found: Kośāla and Kāliṅga in the Kṛtayuga, Vaṅga and Mālava in the Tretāyuga, Saurāṣṭra and Maṇipuraṇḍraka in the Dvāparayuga, Sopāra³⁰ and Vajrākara³¹ in the Kaliyuga.³² Pearl oysters are said to be found in the seas near Ādāya, Barbara,³³ Āralāṭa, Siṃhala, Ūrmiṇi and Pārasika (129).

The verses on the treatment of various diseases mention syphilis (phiraṅgavā-tajanitasphoṭa and phiraṅgābhidhāvāta) and rasakarpūra, the drug preferentially prescribed against this disease (149).

Some of the rasayogas in the last part of the *Rasapaddhati* are not found in other treatises; examples are ātāṅkāntakarasa (154cd–155) and ekasūteśvararasa (173–174).³⁴ The gaurīyantra is referred to (71; 80). A substance called lohakarpara is mentioned (13).³⁵

Noteworthy plant names are jambha (18, 21, 23),³⁶ jambhala (17),³⁷ mānavī (8), nīravānīra (24),³⁸ śitidhūrta (12), and sṛṣṭyambujā (8).

The author

Bindu mentions his name in the introductory verse.

Date

The references to syphilis and its treatment with rasakarpūra indicate that the *Rasapaddhati* is later than the *Bhāvaprakāśa* (second half sixteenth century), which describes phiraṅgaroga and its therapy for the first time in Indian medical literature. The *Rasapaddhati* may date from the first half of the seventeenth century, because it is one of the sources of the *Āyurvedaprakāśa* and since the earliest MS³⁹ was completed in A.D. 1664.⁴⁰

Commentary

A commentary on the *Rasapaddhati*, reaching up to verse 186, was written by Mahādeva.

Authorities and works quoted or referred to in the commentary are: Amara (1, 6, 7, 8, 89, 90, 98, 104, 150, 152–153, 153–154), *Aṣṭāṅgaśrīdaya* (1), Caraka (45cd), *Rājamaṅgāṅka* (87), *Rasarājalakṣmī* (83), *Rasaratnākara* (6, 7, 8, 9, 10, 11, 13, 14, 58, 59–60ab, 61–62ab, 69–74, 80, 85–87), *Rasaratnasamuccaya* (9, 117–122, 129–132), *Rasavāgbhaṭṭa* (81–82), Somanātha (29–30), and Vāgbhaṭa (44–45ab, 45cd).

Many quotations are not referred to their source.⁴¹ Mahādeva quotes (ad 85–87) a list of divyaśādhis from a source not mentioned by name.⁴² He enumerates the following uparatnas (ad 88): vaikrānta, sūryakānta, rājāvarta, lāla,⁴³ and peroja.

The ūlkā of the *Rasapaddhati* and its author are quoted in the commentaries of Gulrājśarmamiśra and Somadevaśarman on the *Āyurvedaprakāśa* and in the *Rasakāmadhenu*. The commentary on the *Rasapaddhati* is one of the sources of Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna* and Mādhava's *Āyurvedaprakāśa*. Mahādeva is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Mahādeva is regarded as the son of Bindu.⁴⁴ Both father and son may have been residents of Mahārāṣṭra.⁴⁵ Mahādeva is later than Nityanātha, who wrote the

Rasaratnāḍīpikā, and Vāgbhaṭa, to whom the *Rasaratnasamuccaya* is attributed, because the works of these authors are quoted by him; he is also posterior to Bindu, on whose treatise he commented. He is earlier than Mādhava, the author of the *Āyurvedaprakāśa*, who used Mahādeva's work as one of his sources. This evidence establishes that Mahādeva lived, like Bindu, in the first half of the seventeenth century.

Rasapradīpa

An anonymous *Rasapradīpa*⁴⁶ in 282 verses describes both a number of iatrochemical formulae and a series of alchemical procedures.

Subjects dealt with are: a definition of *rasāyana* (1); fifty formulae (2–163);⁴⁷ the preparation of a bhasman of gold, silver, copper, brass (*pittala*), bronze (*kāṁṣya*), lead, and tin (164–199); four methods of *lohamāraṇa* (200–207); *māraṇa* of the seven metals (*dhātu*; 208);⁴⁸ an enumeration of the seven *upadhātus*: *mākṣika*, *tutthaka*, *abhra*, *nīlāñjana*, (*manah*)*śilā*, *ālaka* (= *haritāla*), and *rasaka* (209);⁴⁹ *śodhana* and *māraṇa* of the *upadhātus*, and of *gairī*, *kāsīsa*, *ṭaikaṇa*, *varāṭikā*, *tuvarī*, *śaṅkha*, and *kaṅkuṣṭha* (210–228); *śodhana* of all the *dhātus* (229–231); *śodhana* and *māraṇa* of *hīraka* (*diamond*), *vaikrānta*, *maṇi*, *muktā* (*pearl*), and *pravāla* (*coral*) (232–243); *śodhana* and *māraṇa* of all the *ratnas* (244); the *śodhana* of *śilājatu* (245–250); the preparation of *maṇḍūrabhasman* (251–253) and two varieties of *kṣāra* (*cūrṇābha* or *pratisārya* and *peya*) (254–256); formulae of *rasayogas* (257–277); dietary and other rules (278–282).

Sources are not mentioned. One of the formulae (144–148: *vyādhiharasūtanirmāṇavidhi*) is ascribed to Pūjyapāda. The date of composition and the author are unknown.

Rasapṛakāśasudhākara

The *Rasapṛakāśasudhākara* by Yaśodhara⁵⁰ is a treatise devoted to alchemy and iatrochemistry.

*Contents*⁵¹

The *Rasapṛakāśasudhākara*, entirely written in verse, consists of 1,286 verses, arranged in thirteen chapters (*adhyāya*).

Chapter one (*aṣṭādaśarasasamīkṣānirūpaṇa*; 164 verses) opens with a *maṅgala* of four verses in praise of Harihara, Śārādā, Gaṇapati, and mercury. These stanzas are followed by a table of contents (5–12). Subjects dealt with in the next verses are: the origin of mercury and its varieties (13–21), the eighteen *saṁskāras* (22–25ab), the five *doṣas* (25cd–26) and the seven *kañcukas* (27–30ab) of mercury. The remaining part of chapter one gives an account of the eighteen *saṁskāras*: *svedana* (30cd–35), *mardana* (36–41), *mūrchana* (42–45ab), *utthāpana* (45cd–47), the three varieties of *pātana* (48–62ab), *rodhana* (62cd–65), *niyamana* (66–67ab), *dīpana* (67cd–78), *grāsamāna* (79–83),⁵² *cāraṇa* (85–93ab), *garbhadruti* (93cd–97ab), *bāhyadruti* (97cd–101ab), *jāraṇa* (101cd–119), *rañjana* (120–127), *sāraṇa* (128–140ab), *krāmaṇa* (140cd–146ab), *vedhana* (146cd–156), and *sevana* (157–164).

Chapter two (*caturvidharasabandhana*; 109 verses) enumerates four types of

bandha of mercury: ⁵³ jalaukā- or prakvabandha, khotā(ka) or piṣṭistambha, pāṭaka ⁵⁴ or parpaṭikābandha, and bhasmabandha (2–3). These bandhas may be brought about by means of mūlikā (substances of vegetable origin), maṇi (gems), svarṇaka (gold), and lead (nāga) or tin (vaṅga); bandha by means of gold is called dhātubandha; ⁵⁵ the merits of these methods decrease in the mentioned order (4–5). A fifth method, drutibandha, is regarded as superior, in particular if abhradruti is employed in the process (6). Five varieties of mūlikābandha are described (7–35), two types of maṇibandha (employing vajrasattva and vajrabhasman; 36–50ab), three types of drutibandha (employing abhrakadruti, hemadruti and vajradruti; 50cd–70ab), and five varieties of dhātubandha (employing gold, silver, tutthaka, tin, and a mixture of substances; 70cd–107).

Chapter three (sūtabhasmakathana; 64 verses) is concerned with the preparation of mercurial ashes (sūtabhasman), four varieties of which are distinguished: white, black, yellow, and red (1). The chapter describes the preparation of mercury from cinnabar (2–5), the preparation of rasakarṭūra (6–10ab), udayabhāskararasa (10cd–14), ⁵⁶ raktarasa (15–18), and rasamāṇikya (19–22), the jāraṇa of sulphur (23–26), the preparation of rasapoṭṭālī (27–31ab), kṛṣṇabhasman (the black type; 31cd–35), śuddharasabhasman (36–38), rasaparpatī (two varieties; 39–58ab), ⁵⁷ and some more varieties of rasabhasman (58cd–63).

Chapter four (dhātuśodhanamāraṇanirūpaṇa; 120 verses) is concerned with the purification and killing of the metals (dhātu or loha). The metals are said to be eight in number, but nine of them are enumerated: gold and silver, called śuddhaloha; copper and iron, called aśmasāra; lead and tin, called pūtiloha; saurāṣṭra (= kāmśya), rīti (= pītala) and vartaka, the three alloys (saṃmīśraloha) (2–4ab). Various methods of purifying the metals and killing them are described. Two varieties of gold are distinguished, rasaja and khanisaṃbhava, although three more varieties are referred to (4cd–5ab). Silver is of three types: khanija, sahaja and kṛtrima (21), copper of two types: nepāla and mlecchaśeṣaja (35cd). Iron is of three types: kānta, tīkṣṇavara and muṇḍa; four varieties of kāntaloha are described: romaka, bhrāmaka, cumbaka and drāvaka (57–62). Tin is of two types: khura and miśra (79ab). Two types of pītala are described: rītikā and kākatuṇḍikā (105cd–106). Kāmśya is characterized as an alloy of copper (ravi) and tin (trapu) in a ratio of four to one (112cd–113ab), vartaloha as an alloy of iron, kāmśya, copper (arka) and rīti (= pītala) (116ab); viḍaloha is mentioned as a synonym of vartaloha (116cd).

Chapter five (mahārasanirūpaṇa; 132 verses) is about the mahārasas, their names and varieties, their purification, killing and sattvapātana (the extraction of their essences). Eight mahārasas are listed: gagana (= abhraka), rasaka, tāpya (= mākṣika), vaikrānta, vimala, sasyaka, ⁵⁸ śailasaṃbhūta (= śilājatu) and rājāvartaka (2–3ab). Four varieties of mica (abhraka) are described: vajra, pināka, nāga and maṇḍūka (3cd–7). Vaikrānta is of eight varieties (62); vimala is of three types (80–81ab). Two varieties of śilājatu are distinguished: gomūtra and ghaṇasāraka (90cd); ⁵⁹ a third one is added, called karpūraśilājatu, which differs from the other varieties because its killing and the extraction of its essence are not described by the experts (104–105). ⁶⁰ Two varieties of rasaka are mentioned: kāravella and dardura ⁶¹ (106), ⁶² and two varieties of mākṣika: rukmamākṣika (= suvarṇamākṣika) and tāpya (121–122). ⁶³

Chapter six (91 verses) deals with the eight uparasas, their varieties, properties, purification and essences (sattva). The eight uparasas are: tālaka, tuvarī, gandha (sulphur), kaṅkuṣṭha, kunaṭī (= maṇaḥśilā), gairika, añjana and kāsīsa (1). Two varieties of tālaka are distinguished: dalākhyā and aśmasaṃjñaka (2),⁶⁴ two varieties of saurāśṭrī (= tuvarī): pītikā and phullikā (11cd–13),⁶⁵ three varieties of maṇaḥśilā: śyāmā, rakṭā⁶⁶ and khaṇḍikā (17–18), five varieties of añjana: sauvīra, rasāñjana, sroto'ñjana, puṣpāñjana and nīlāñjana (23),⁶⁷ four varieties of gandhaka (sulphur): śveta, pīta or amlasāraka, rakta or śukatuṇḍa, and kṛṣṇa (29cd–32),⁶⁸ four varieties of kaṅkuṣṭha: nalika, reṇuka, the excrements of a female elephant that has just brought forth (sadyaḥprasūta), and the nāla (umbilical cord) of a horse (54–58ab),⁶⁹ two varieties of kāsīsa: saikata and puṣpākhyā (63–65ab),⁷⁰ and two varieties of gairika: pāṣāṇagairika and svarṇagairika (70–71ab).⁷¹ The same chapter is concerned with navasāra or cullikā (74–75), biḍa (76ab), three varieties of varāṭikā, differing in weight (76cd–80), agnījāra (81–82), girisindūra (83–84), two varieties of cinnabar (darada): śukatuṇḍa or carmāra and haṃsapāda (85–89ab), and, finally, mṛddāśṛṅgaka (89cd–90).

Chapter seven (66 verses) describes the precious and semi-precious stones (ratna), their varieties, qualities and defects;⁷² the purification and killing of diamonds are dealt with, as well as the purification and druti of all the gems mentioned. The ratnas described in chapter seven are: māṇikya (ruby) and its two varieties, called padmarāga and nīlagandhi (3–7), mauktika (pearl; 8–10), vidrūma (coral; 11–13), tārṅkṣya (emerald; 14–16),⁷³ puṣpaka or puṣparāga (topaz; 17–19), vajra (diamond) and its varieties (20–27), nīla (sapphire; 45cd–49),⁷⁴ gomeda (50–53), and vaidūrya (54–56).

Chapter eight (śatarasanirūpaṇa; 276 verses), the longest, contains 103 formulae of rasayogas, to be employed against various diseases.

Chapter nine (divyauśadhyādinirūpaṇa; 39 verses) contains lists of the sixty-four divyauśadhis (1–12ab), sixty-eight rasauśadhis (12cd–22ab), sixty-eight mahauśadhis (22cd–30ab), and sixty-eight rasādhikamahauśadhis (30cd–39).

Chapter ten (yantrādinirūpaṇa; 54 verses) contains a list of the names of forty yantras:⁷⁵ adhaḥpātanaḥ, antarālikasaṃjñika, bhairava, bhasmayantra, bhūdhara-bhidha,⁷⁶ cipīṭākhyā, ḍamaruka, devāhvaya, ḍhekyākhyā, dhūpayantra, dīpikāhvaya, dolā, gandhapiṣṭakayantra, garbhayantra, ghṇikāyantra, ghaṭīyantra,⁷⁷ grastāhvaya, guhya, haṃsapākābhidha,⁷⁸ iṣṭikāyantra, jālayantra, khalva, kinna-ra, koṣṭhikākhyā, kuṇḍasaṃjñā, kūṭīyantra, lavaṇa(yantra), nābhiyantra, niḡaḍa, palabhāliyantra, pālikākhyā, pātāla,⁷⁹ sāraṇīyantra, somānala, sthālīyantra, tīryakpātanaḥ, tulābhidha, ūrdhvaḥpātanaḥ, vālukāyantra, and vidyādhara (2–8).⁸⁰

This list is followed by a verse with the synonyms of mūṣā (9–10ab) and descriptions of various types of mūṣā:⁸¹ yoga-, gāra-, vara-, varṇa-, rūpya-, biḍa-, vajra-, vṛntāka-, gostanī-, malla-, pakva-, mahā-, mañjūṣa-, garbha-, and muṣālamūṣā (10cd–28). The chapter continues with descriptions of a number of types of koṣṭhikā: āṅgāra-, pātāla-, gāra-, and tīryakpradhamaṇakoṣṭhikā (29–40). It ends with the characteristics of various types of puṭa: mahā-, gaja-, vārāha-, kukkuṭa-, kapota-, govāra-, mṛdbhāṇḍa-, vālukā-, bhūdhara-, and lāvakaḥpuṭa (41–54).

Chapter eleven (dhātukautukanirūpaṇa; 135 verses) is mainly concerned with auri- and argentifaction; eighteen ways of making artificial gold (hemakriyā) and

seventeen ways of making artificial silver (tārakriyā) are described, as well as some methods to improve the grade of artificial gold (varṇotkarṣakriyā). Additional subjects are the making of artificial pearls, increasing the size of small pearls, and the making of artificial coral.

Chapter twelve (vājīkaraṇa; 20 verses) contains aphrodisiac formulae.

Chapter thirteen (śukra- or vīryastambha; 16 verses) contains recipes that suppress ejaculation (1–13), followed by some concluding verses.

Authorities and works referred to are: Bhairava (7.26; 8.120), *Devīśāstra* (1.27; 2.100),⁸² Manthānabhairava (8.173–174), Nāgārjuna (5.107), Nandin (6.73), Nandirāja (1.145), *Prakāśāmṛta* (8.275), Somadeva (7.37; 9.11),⁸³ and Svacchandabhairava (8.132–133). P. Rāy⁸⁴ asserted that the *Rasārṇava* is quoted in the *Rasaprakāśasudhākara*.⁸⁵

A Yaśodhara is one of the Rasasiddhas in the Vādikhaṇḍa of the *Rasaratnākara* (1.67). Yaśodhara is said to be the same as the Yaśodhana of the *Rasaratnasamuccaya*.⁸⁶

Yaśodhara is quoted in Guṛārjśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. He is cited as Padmanābhasūnu in Guṛārjśarmamiśra's commentary on the *Āyurvedaprakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

The *Rasaprakāśasudhākara* is quoted or referred to in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, the *Dharaṇīdharasamhitā*, Guṛārjśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Pāradasamhitā*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the bhasmapīṣṭhiprakaraṇa of the *Rasoddhāraṇtantra*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*; it is one of the sources of the *Bheṣajasaṃhitā*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, the *Rasavidyāmahārṇava*, the *Rasoddhāraṇtantra*, and Yādavajī's *Rasāmṛta*.

Special features

The *Rasaprakāśasudhākara* is a conveniently arranged and orderly work, chiefly composed by the author himself. Yaśodhara is a remarkable writer, who, repeatedly, without wasting words, makes clear which parts of his treatise derive from earlier works⁸⁷ and which parts are based on his own experience⁸⁸ or that of his teacher.⁸⁹

Yaśodhara was obviously interested not only in alchemy for its own sake, but also in the medicinal uses of alchemical products. The medicinal properties and actions of many substances are recorded in detail, while chapters three, eight, twelve and thirteen mainly consist of recipes and their indications.

Yaśodhara does not describe the alchemical laboratory, its apparatus, implements, etc., giving only a list of yantras, etc., in chapter ten. However, the characteristics of a few yantras occur in chapter one: khalva (1.37cd–39), ūrdhvaṇḍāyantra (1.50–56ab), adhaḥpāṇāyantra (1.56cd–58ab), tiryakpāṇāyantra (1.58cd–62ab), jalayantra (1.87–91),⁹⁰ and sārāṇāyantra (1.128–140ab).

Chapter one refers to a utensil called karoṭī (1.85),⁹¹ to vahnimṛttikā (1.90),⁹² ghoṣākṛṣṭa (1.94),⁹³ and nīlakalka (1.106–107ab). The same chapter distinguishes

five kinds of vedha, called lepa-, kṣepa-, kunta-, dhūma-, and śabdavedha (1.146cd–156).⁹⁴ The verses on the use (sevana) of mercurial preparations (1.157–164) do not refer to the inherent dangers.

Chapter five does not mention capala as one of the mahārasas, whereas rājāvarta is included in this group. The amṛtikaraṇa of killed mica (mṛtābhra) is not described. Eight varieties of vaikrānta are mentioned; karbura is added to the more usual list of seven varieties.⁹⁵ The description of the extraction of the essence (sattva) of rasaka (5.112–116) is regarded as a process to win zinc from its ore; the sattva is said to resemble lead (sīsa).⁹⁶

Chapter six contains accounts of substances usually regarded as sādhanārasas.⁹⁷ Some of these substances are: agnijāra (6.81),⁹⁸ girisindūra (6.83), and mṛddāraśṅgaka (6.89).⁹⁹ Kampillaka and gaurīpāṣāṇa are not dealt with.

Chapter eight frequently employs the term jūrti for fever,¹⁰⁰ although the more usual jvara is used as well. A disorder arising from the abuse of opium is referred to (8.39). The formula of rāmaḥānārasa associates agnimāndya with Daśavakra, i.e., Rāvaṇa, saṃgrahāṇagrahaṇī with Kumbhakarṇa,¹⁰¹ and āmavāta with Khara and Dūṣaṇa.¹⁰² Contrary to usage, the formulae of the rasas of chapter eight are not attributed to divine authorities and ancient sages.¹⁰³

The list of sixty-four divine herbs (divyauśadhi) of chapter nine is based, as Yaśodhara himself indicates, on Somadeva's *Rasendracūḍāmaṇi*. The source or sources of the lists of rasauśadhis, mahauśadhis and rasādhikamahauśadhis remain unknown.¹⁰⁴

The sixty-eight rasauśadhis are: ajamārī, alambuṣā, aparājītā, ardhacandrā, ativiṣā, bhārgī, brhatī, candrodakā, ciṇcā, citrapālikā, durālabhā, durgandhā, garuḍī, gojīvā, guḍīci, haṃsapādī, hariṇī, hemapuṣpī, īśvarī, jalakumbhī, jalamūlakā, jalāpāmārga, jalapippalikā, jālinī, jalotpalā, kāśmarī, kukkuṭā, lāṅgalī, mālārjunī, mārṣikā, maṇḍūkī, mañjiṣṭhā, markasphoṭī, meghanādā, mohinī, mūrvā, muśalī, nandinī, pāgava, pāṣāṇī, pātālā, paṭolī, potakī, rasā, rasacitrā, samaṅgā, sārivā, sarpākṣī, śathikā, śikhipādī, śīśikā, sitagandhinī, śṛṅgī, sthalasārīṇī, śukanāsikā, tiktikā, tulasī, tuṣāmbukā, uttamā, vajrakandikā, vanakūśmāṇḍavallikā, vanamālī, varāhī, vāsā, veṇukā, vidārī, viṣaghnī, and vṛścikālī (9.12cd–22ab).

The sixty-eight mahauśadhis are: adhoguptā, ajagandhā, ajamodikā, āmalī, amlikā, āsurī, aśvagandhā, atibalā, bākucī, balā, bimbī, dantī, dhātakī, drākṣā, dravanti, dūrvā, elā, gavākṣī, girīkarṇikā, grīṣma, hapuṣā, jantupādī, jātī, jyotsnā, kadalī, kākāhāvā, kāsamarḍikā, kekicūḍā, kharjūrī, lakṣmaṇā, mahābalā, mallikā, nāgabalā, nalikā, nālīkerī, nirguṇḍī, nilinī, nīlotpalā, phalgu, prasārīṇī, prthvī, rāsnā, ṛddhi, śālmalī, śamī, śaṅkhapuṣpī, śarapuṣpikā, sārivā, sātalā, śatapuspā, śatāvarī, śiṃśī, sinduvāra, soṣṇī, śrāvāṇī, svarṇakṣīrī, taruṇī, tejovatī, trāyamāṇā, trivṛt, tugā, varā, varṣā, varṣābhū, vārṣikī, viśālā, viṣāṇī, and yūthikā (9.22cd–30ab).

The sixty-eight mahauśadhis which are rasādhikā consist of: adhaḥpuṣpī, ajagandhā, ambumūlikā, arkavallikā, aṣṭavallī, āsurī, aśvinī, avantī, bhṛṅgavallī, bhṛṅgī, cakravallī, chidralambikā, devagandhārī, devī, dugdhikā, gajapippalikā, gaṅgeṭī, grāhanakhī, grājanī, haṃsapādikā, ingudī, īśvarī, jambīravallikā, jantukārā, jārāvalī (or jarāvallī), jayantikā, kākāṇḍolā, kālavarṇā (latā), kāmbojī, kāñcanī, kanyā, karavīrā, kāṣṭhāgodhāmatī, khotakā, kṣetṛī, kṣutkārī, kuberākṣī, mahārāṣṭṛī, mayūrākhyā, nāhī,

nākulī, nārācī, palāśatilakā, palāśinī, panasī, parpaṭī, rajanī, rājapadmā, rājaśamī, rohitā, sahadēvī, śallakī, saṃvīrā, śarapurīkhikā, sarpadaṣṭā, siddheśvarī, śigruvallī, sirṇhikā, śivāṭikā, somarājikā, śṛṅgarīṭikā, śṛṅkhalā, tāmrvallikā, tauvarī, tuṭumbhaṭī, vaṅgajā, vijayā, and viśakharparikā (9.30cd–39).

Some names of yantras listed in chapter ten are less common or unusual: cipiṭa-yantra,¹⁰⁵ bhairavayantra, niḡaḍayantra, sārāṇāyantra,¹⁰⁶ guhyayantra, gandhapiṣṭakayantra, kūpiyantra,¹⁰⁷ devayantra, and ghāṇikāyantra. The description of the jalayantra differs from that of related yantras in other texts.¹⁰⁸

Some noteworthy names of plants and substances of vegetable origin (apart from those found in chapter nine) are: ākallaka (8.32 and 36), dvīpāntarothā (8.36),¹⁰⁹ karabhā (13.2), karahāṭa (13.9 and 11),¹¹⁰ khurāsānī (13.1), loṭṭāka (8.264),¹¹¹ mastakī (13.1), pōsta (13.8), postaka (13.13), rāgiṇī (11.6), śvetāmbarī (8.265), and trinēmī (11.6). Opium is frequently found in Yaśodhara's materia medica.¹¹²

Cinnabar originating from Western countries (romadeśīya) is referred to (11.9).

The author

Yaśodhara mentions in the concluding verses of his treatise his own name, Yaśodhara or Bhaṭṭayaśodhara, the name of his father, Padmanābha, who was a brāhmaṇa of Śrī-gauḍa lineage, and the place of his residence, the walled town (prākāra; durga) called Jirṇa, located in Surarāṣṭra.¹¹³ Yaśodhara, who calls himself a kavi and kavivara, adds that his father was a devotee of Viṣṇu.¹¹⁴

Date

The references to Somadeva, the author of the *Rasendracūḍāmaṇi*, establish that Yaśodhara is later. Prafulla Chandra Rāy¹¹⁵ was of the opinion that the observations on the metallurgy of zinc, found in the *Rasaratnasamuccaya*, were based on similar observations in Yaśodhara's work.¹¹⁶ This hypothesis, which makes the *Rasaprakāśasudhākara* into an earlier work than the *Rasaratnasamuccaya*, was accepted by a number of subsequent scholars.¹¹⁷

Most scholars, being convinced that the *Rasaprakāśasudhākara* is posterior to the *Rasendracūḍāmaṇi* and anterior to the *Rasaratnasamuccaya*, assign the work to the thirteenth century.¹¹⁸

Actually, Yaśodhara belongs to a later period, because he was acquainted with the drug usually called cobacīnī, but referred to in the *Rasaprakāśasudhākara* as dvīpāntarothā (8.36).¹¹⁹ This drug, of foreign origin, as indicated by its name, was introduced by the Portuguese in the sixteenth century.¹²⁰ In agreement with this date is the description of rasakarpūra (3.6–10ab). Both cobacīnī and rasakarpūra were employed in the treatment of syphilis, a disease left unmentioned in the *Rasaprakāśasudhākara*, which may mean that Yaśodhara, although belonging to the sixteenth century,¹²¹ preceded Bhāvamiśra, who composed the *Bhāvaprakāśa*.¹²² This chronological position implies that Yaśodhara's work and the *Rasaratnasamuccaya* are not far removed from each other in time.

Rasarājalakṣmī

The *Rasarājalakṣmī* by Viṣṇudeva¹²³ is a treatise on alchemy and iatrochemistry.

Sources mentioned are: Ātreya, Bhagavadgovinda (the author of the *Rasahrdaya*), Bhavānimata, Caraka, Dāmodara, Hārīta, Īśahrdaya,¹²⁴ Kākacaṇḍeśvarītantra, Nāgārjuna, Rasasāgara, Rasasudhāmbhodhi, Siddhasāra, Suśruta, Sūtamahodadhi, Svacchandaśaktyāgama, Vāgbhaṭa, Vāsudeva, Vṛnda, and Vyāḍi.¹²⁵ The *Rasārṇava* is by some added to this list.¹²⁶

G. Hāldār asserts that Rāmeśvarabhaṭṭa, Viṣṇudeva's son, wrote a commentary on his father's work.¹²⁷

The *Rasarājalakṣmī* is quoted in the *Amṛtasāgara*, *Brhadyogatarangīnī*, *Rasakāmadhenu*, *Rasasindhu*, *Rasayogasāgara*, Ṭoḍara's *Āyurvedasaukhya*, and the *Yogaratanākara*. It was one of the sources of the *Āyurvedaprakāśa*.

Subjects dealt with in the *Rasarājalakṣmī*¹²⁸ are, according to the quotations from the work: the preparation of fermented beverages (sarṇdhāna),¹²⁹ the preparation of a biḍa in general¹³⁰ and of a haṃsapākabiḍa,¹³¹ the liquefaction (druti) of gems,¹³² the rasas¹³³ and mahārasas,¹³⁴ the purification of uparasasattva,¹³⁵ the varieties of mā-kṣika,¹³⁶ capala,¹³⁷ the uparasas,¹³⁸ the properties of mūrchita and baddha mercury,¹³⁹ mūrchana,¹⁴⁰ mukhakarāṇa,¹⁴¹ jārāṇa,¹⁴² jalaukābandha,¹⁴³ and daradākṣṭi.

Formulae from the *Rasarājalakṣmī* are found in the *Rasayogasāgara* and some other treatises.¹⁴⁴

Viṣṇudeva, son of Mahādeva,¹⁴⁵ was patronized by king Bukka I of Vijayanagar (A.D. 1356–1377).¹⁴⁶

Viṣṇudeva is also called Viṭṭhala or Viṭṭhalagalaṇḍa¹⁴⁷ and his father Mahādeva-galaṇḍa.¹⁴⁸ The original place of residence of the family was Elichpur (Alasapuram).¹⁴⁹ Descendants of Viṭṭhala are said to be still living at Gulbarga in the Deccan.¹⁵⁰

Viṣṇudeva or Viṭṭhala was also the author of the *Rasasindhu*¹⁵¹ and of four medical treatises in Marāṭhī: *Hitopadeśa*, *Rasakaumudī*, *Rasaratnapradīpa*, and *Vaidyacakora-candrikā* or *Vaidyacandracakorikā*.¹⁵²

Rasaratnadīpikā

The *Rasaratnadīpikā* by Śrīvāṇeśvara Bhaṭṭācārya¹⁵³ is a collection of rasayogas, mixed with āyurvedic recipes, preceded by a short section on some alchemical operations.

Contents

The work begins with verses, mixed with prose, praising mercury, describing the doṣas of mercury and their removal, etc., followed by stanzas on the purification, etc., of the metals and sulphur (1–8).

The remaining part of the treatise contains rasayogas and āyurvedic recipes, to which glosses are added, against the diseases mentioned in the *Mādhavanidāna* and a number of disorders described in later treatises. Many formulae are ascribed to divinities and famous authorities; some are attributed to Caraka,¹⁵⁴ Hārīta,¹⁵⁵ and

Vaṅgasena.¹⁵⁶ A pariśiṣṭa deals with the three doṣas and some other general topics.
The only treatise referred to is the *Rasāṅga* (4).

Special features

Noteworthy disorders mentioned are: agramāṇsa (367–368),¹⁵⁷ āhavajvara (76–81),¹⁵⁸ asthijvara (103),¹⁵⁹ and raktadhātugatadāha (103).¹⁶⁰

The section dealing with the treatment of women's diseases includes verses on disorders called bādhaka, caused by four demonic beings, dangerous to pregnant women and women in childbed, whose names are Raktamādrī, Jaṅkurī, Śaṣṭhī, and Jalakumāraka. These beings are described, together with the symptoms occasioned by their attack (409–410).¹⁶¹ This description is followed by a quotation in sixteen verses and a section in prose from the *Bhairavītantra*,¹⁶² concerned with the means of appeasing the demons mentioned (411–414).

Unusual is the presence of a number of prescriptions fathered on Sanaka (167; 174; 175; 177–178; 190; 242; 260; 332–333; 342).

Author

The author was a pupil of Harināthaśarman.¹⁶³

Date

The *Rasaratnadīpikā* was completed in 1932/33.¹⁶⁴

Chapter 8

Rasaratnākara

The *Rasaratnākara* by Nityanātha¹ is an important treatise on alchemy and iatrochemistry.

Contents²

The *Rasaratnākara* is divided into five sections (khaṇḍa): (I) Rasakhaṇḍa, (II) Rasendrakhāṇḍa, (III) Vāda-, Vādi- or Ṛddhikhāṇḍa, (IV) Rasāyanakhāṇḍa, and (V) Mantrakhaṇḍa.³

The Rasakhaṇḍa

The *Rasakhaṇḍa*⁴ (577 verses) consists of ten chapters (upadeśa).⁵ Chapter one (rasapīthikā; 33 verses) opens with a maṅgala addressed to Caṇḍikā (i.e., a terrific form of Pārvatī)⁶ and Candraśekhara (i.e., Śiva), followed by some verses on the five sections of the *Rasaratnākara* and those to whom they are addressed (1–6). The other subjects of chapter one are: the praise of mercury (7–14 and 23–24) and the iatrochemist (15), the usefulness of the book (16–22 and 25–26), the doṣas of naturally occurring mercury (27–29ab), the qualities of purified mercury (29cd–30), and the quantity to be taken for purification (31–33). The treatise is declared to be based on earlier works, the teachings of the author's guru and personal experience (16–22).

Chapter two (rasaśodhanamāraṇa; 46 verses) describes the purification and killing of mercury. Four kinds of bhasman are produced by these processes: white, yellow, red, and black in colour. The mārāṇuśadhis are listed in this chapter (15–20).

Chapter three (mārāṇa; 46 verses) is about a better method of killing mercury; this type of killing is preceded by jāraṇā and the addition of a bīja (1–2). In order to achieve jāraṇā, mercury has to be provided with a 'mouth' (mukha) first (3–7ab), which process is called mukhakaraṇa. Killing of mercury is also possible, without giving a mukha to mercury (nirmukha), by adding a biḍa; the way to prepare a biḍa is described (13cd–18). The niyāmaka plants are enumerated, employed in the mārāṇa, mūrchana and bandhana of mercury (34–41). The examination of mercurial bhasmans and their uses are dealt with (43cd–46).

Chapter four (mūrchanādinirūpaṇa; 54 verses) is concerned with the mūrchana and bandha of mercury. The same chapter describes the preparation of haira-ṇyagarbhakarasa (29cd–30). The chapter ends with a verse on the daivī, mānuṣī and rākṣaṣī types of medical treatment (54), i.e., the treatment with rasas, with herbs and mantras, and with surgical methods.

Chapter five (vajravaikrāntaśodhanamāraṇa; 49 verses) enumerates the uparasas: gandhaka, vajra, vaikrānta, vajrābhra,⁷ tālaka, (manah)śilā, kharpara, śikhituttha,⁸ vimalā, hemamākṣika, kāsīsa, kāntapāṣāṇa, varāṭī, hiṅgula, kaṅkuṣṭha, śaṅkha, bhūnāga, ṭaṅkaṇa, and śilājatu (1–2). Described are the purification and killing of sulphur (gandhaka; 4–9), diamonds (vajra; 10–46) and vaikrānta (47–49), as well as the varieties of diamonds, distinguished according to their colour: śveta (= brāhmaṇa), rakta (= kṣatriya), pīta (= vaiśya), and kṛṣṇa (= śūdra), or their gender: puruṣa, strī and napuṃsaka (16–23).

Chapter six (abhrakaśodhanamāraṇa; 44 verses) gives an account of the four varieties of mica (abhraka), the purification of its best variety (vajrābhra), resulting in dhānyābhra,⁹ killing of dhānyābhra, and the amṛtīkaraṇa of the bhasman.

Chapter seven (sarvoparasasattvapātana; 56 verses) deals with the purification of tālaka (1–8), manahśilā (9–12), rasaka (= kharpara; 13), tuttha (14–15), vimalā (16–18), and mākṣika (19–28); the impurities of the uparasas (called dhātu here; 29–30), the killing of coral (vidrūma; 31), the purification and killing of the eight gems and manahśilā (32–34), the purification of śaṅkha, nīlāñjana, darada (= hiṅgula), sauvīra, kāntapāṣāṇa, etc. (35–42), and the sattvapātana of guggulu, tālaka, (manah)śilā, mākṣika, and all the uparasas (43–56).

Chapter eight (svarṇādivaṅgāntamāraṇa; 101 verses) begins with an enumeration of the group of twelve metals and allied substances; the eight metals (lauha) consist of: gold, silver, copper, lead, tin, and three kinds of iron: kānta, tīkṣṇaka, and muṇḍa; the three alloys (upalauha) are: kāmṣya, āra (= pittala) and ghoṣaka; maṇḍūra is the twelfth item (1–2). Described in this chapter are the purification and killing of gold, silver, copper, lead and tin.

Chapter nine (kāntalauhādikiṭṭamāraṇa; 67 verses) is concerned with the purification, killing and amṛtīkaraṇa of the bhasman of iron (1–60), the purification and killing of the upalauhas (61–64), and the purification of maṇḍūra (65–67). One method of killing iron has been borrowed from the Siddhas (47–51ab).

Chapter ten (tailapātana; 81 verses) deals with the preparation of a large number of oils (1–27) and many other subjects: poisonous substances (28–61), the purification of bile (61), śilājatu (61–69ab and a passage in prose), substances used for bhāvanā (śālasārādigaṇa; 69cd–71), the process of bhāvanā (72–73),¹⁰ the purification of dagdhahiraka (74),¹¹ guggulu and its purification (75–77 and a passage in prose), and the purification of śaṅkhanābhi, varāṭī, and muktā (78–81).

The Rasendrakhanda

The *Rasendrakhanda*¹² (about 5,100 verses) consists of seventy-one chapters (adhikāra), dealing with the aetiology, symptomatology and treatment of diseases, largely arranged in agreement with the *Mādhavanidāna*.¹³ Some chapters on diseases left undescribed in Mādhava's work are added, as well as chapters on rasāyana (68), rasājīrṇa (69), and vājīkaraṇa (70).

The verses on therapy contain both āyurvedic recipes¹⁴ and rasayogas. Glosses, explaining technical terms, names of plants, etc., are not rare.

Chapter one (jvara and jvarātīśāra; 421 verses) begins with verses said to repre-

sent Caraka's views on the catuṣpāda (the four pillars of treatment; 1–26).¹⁵ Verses on karmaḥ and doṣaḥ disorders, the three doṣas, other constituents of the body, etc. (27–89), precede the section on the treatment of fevers (90–405) and jvarātisāra (406–421). The chapter on raktapitta has an appendix on the purification of sulphur; it is written in verse and prose, borrowed from earlier works. The chapter on vātavyādhī has verses on the purification of substances employed in the preparation of fragrant oils (vātavyādhī 184–195) and on other subjects connected with perfumery (vātavyādhī 196–236).

Several mantras¹⁶ and two yantras¹⁷ are mentioned.

The author of the glosses is unknown. The majority consist of short explanations, but some are more elaborate.¹⁸ The glossator refers to variants of the text¹⁹ and disagreeing opinions.²⁰

The Vādikhaṇḍa

The *Vādikhaṇḍa*²¹ (2,325 verses) deals exclusively with alchemy and some related subjects. It is arranged in twenty chapters.

Chapter one (rasadīkṣā; 76 verses) is about the teacher and his pupil, the dīkṣā, and the rasaśālā (laboratory) with its inventory.

Chapter two (vargasādhanaḍirasaśodhanānta; 54 verses) is concerned with the items belonging to several vargas (4–31), the vajramūṣā (31–39), the purification of mercury (39–45), the taptakhalva (46–47), and the preparation of mercury from cinnabar (48–54). The vargas mentioned are: kṣāravarga, śuklavarga (= śvetavarga), viḍvarga, amlavarga, lavaṇapañcaka, kṣāratraya, mūtravarga, raktavarga, pītavarga, and the group of divine herbs (divyaūṣadhi).

The subjects of chapter three (vajrasādhanaḍidhātumārāṇa; 129 verses) are: diamonds (vajra), their varieties (2–5), their purification (6–13ab) and killing (13cd–48ab), their mṛdūkaraṇa, which makes them into what is called vajraudana (48cd–64); the purification of vaikrānta and the uparasas (65–67), the purification of sulphur (68–76) and the extraction (pātana) of its oil (77–82), the purification of tālaka, vimala, rasaka, and other substances (83–97), the preparation of dhānyābhraka (98–99), and the killing of abhraka (100–104); the purification of all the metals (105–108), and the killing of lead, iron, tin, copper, silver, gold, āra (= pittala) and ghoṣa (= kāmṣya) (109–129).

Chapter four (tārarañjana; 163 verses) gives an account of the preparation of gandhakapiṣṭikā (2–3ab and 13–31) and svarṇapiṣṭikā (3cd–4ab), gandhakajāraṇa (4cd–8), the preparation of the gold called siddhayoga (9–12), the stambhana, jāraṇa and māraṇa of gandhakapiṣṭī (32–41ab), the preparation of artificial gold (tāravedha; 41cd–64, 74cd–77ab, 90cd–107ab, 117cd–120ab, 123cd–132, 156–163), the preparation of tārāriṣṭa²² and its uses in making artificial gold (65–74ab, 77cd–86, 133–151), aurification by means of the bhasma of lead (87–90ab), the preparation of siddhacūrṇa and its uses in aurification (107cd–117ab and 120cd–123ab), and the turning of copper into gold (152–155).

Chapter five (varṇotkarṣaṇavarṇavivardhana; 56 verses) describes the preparation of sitasvarṇa (an alloy of gold and silver) and its turning into pure gold (2–22), the preparation of pakvabīja which turns sitasvarṇa into pure gold (23–30), the preparation

of hemaraktikā, and the improvement of the quality of gold of less than ten varṇa²³ (varṇavivardhana; 31–55).

Chapter six (rañjanādicandrārkavedhana; 125 verses) is about various methods which transmute lead (2–28ab), copper, candrārka and sitasvarṇa (28cd–125) into gold.

Chapter seven (drutasūtaprayoga; 127 verses) is concerned with processes which turn various metals into gold and with substances employed in these processes. Its subjects are: the preparation of piṣṭigola (2–9), nigaḍa (10–16),²⁴ mercurial khoṭa (17–25ab), biḍavaṭī (25cd–28ab),²⁵ drutasūta (28cd–42), and the transmutation, by means of drutasūta, of various metals into gold: copper, lead, candrārka, silver and sitasvarṇa. An additional subject is the khoṭabandha of mercury (72–73).

Chapter eight (vaṅgastambhanādidalakaraṇa; 144 verses) describes operations which turn tin and copper into silver. Additional subjects are the purification of tin (2–4) and copper (93–97).

Chapter nine (vajrayogena hemakaraṇam; 131 verses) gives an account of methods which turn various metals into gold by means of substances prepared from mixtures of diamonds and mercury or gold (dvandvakhoṭa).

Chapter ten (pakvabījavarṇasādhana; 90 verses) is about the following subjects: the preparation of pakvabīja (2–8) and nāgabīja (9–12); the colouring of a bīja (13–24); the preparation of tārabīja (25–34); the preparation of sārāṇatāila (38–44); the preparation of krāmakasattva, used in krāmaṇa (45–52); the preparation of various types of biḍa and their use in jāraṇa (54–90).

Chapter eleven (svedanādyanuvāsanaṅtasaṃskāranavaka; 36 verses) enumerates eighteen saṃskāras of mercury: svedana, mardana, mūrchā, utthāpana, pātana, nirodhana, niyāma, dīpana, anuvāsana, jāraṇa, cāraṇa, garbha(druti), bāhyadruti, rañjana, sārāṇa, anūsārāṇa, pratisārāṇa, and krāmaṇa (2–3). The first five saṃskāras, followed by dīpana and anuvāsana, are described in this chapter.

Chapter twelve (gandhakābhrahmarajatajāraṇa; 85 verses) is concerned with the jāraṇa of sulphur (2–9) and with pakvabīja (10–16), the mukha- and khoṭabandha of mercury (17–22), methods which give a mukha to mercury (25–31), a ritual, accompanied by a mantra, that should precede cāraṇa (32–37), the cāraṇa of abhraka (38–57), the vedha of mercury that has been subjected to cāraṇa (38–70), the nirmukhacāraṇa and -jāraṇa of abhraka (71–74) and the results of these processes (75–84).

Chapter thirteen (abhrakādisattvapātanaḍyabhiṣekānta; 105 verses) describes the extraction of the essence of abhraka (5–21), māṃṣīka (22–32), maṇaḥṣilā (33–41), haritāla (42–50), tuttha (51–55), sauvīra (56), rasaka (57–62), vaikrānta (63–70), gairika (71), saurāṣṭrī (72), sasyaka (73–74), kāsīsa (75–76), rājāvarta (77–78), and śroto'ñjana (79–80). The second part of the chapter is devoted to the making of mixtures of two substances (dvandvamelāpana; 81–98) and to two ways of preparing the fluid used for abhiṣeka (99–103).

Chapter fourteen (dvandvasattvādibījajāraṇahemajāraṇahematārakaraṇa; 107 verses) is about jāraṇa, the svarṇa- and tārabīja employed in this process, and the vedha resulting from it.²⁶

Chapter fifteen (jāraṇādigarbhadrāvaṇa; 128 verses) is about the following sub-

jects: the preparation of various bījas (2–16 and 95–101), the colouring of mercury (rañjana; 17–25 and 64–66), druti (38–50 and 58–60ab), jāraṇa (60cd–63, 79–84, 102–104), and vedha (26–37, 51–57, 67–78, 85–101, 105–127).

Chapter sixteen (bhūnāgasattvādisiddhiyogaiḥ svarṇakaraṇam; 121 verses) is devoted to the preparation of bhūnāgasattva (2–12) and bhūnāgataila (13–14), the preparation of guhyasūta (15–20),²⁷ its jāraṇa and use in making gold (21–41), the use of vaikrāṇṭa of a red, yellow, black, white, or coppery colour in making gold and silver (42–89), the four varieties of capalā and their uses in making gold and silver (90–103), and some other methods to arrive at the transmutation of base metals (104–120).

Chapter seventeen (drutikaraṇa; 73 verses) describes the liquefaction (druti) of mica (abhraka; 2–30), abhrakasattva (31–39), gold and silver (40–42), tīkṣṇaloḥa (43–44 and 53–54), all the metals (45–46 and 56–59), gold (47–52), kāntaloḥa (55), māṅśikasattva (60), all the gems and metals (61–65), diamonds (66–68), vaikrāṇṭa, and all the gems (69–71). The chapter ends with two verses on the stabilization (sthāpana) of a druti (72–73).

Chapter eighteen (drutivajraratna-jāraṇākrameṇa pāṣāṇavedhapyantavedhavi-dhiḥ; 183 verses) deals with several ways of mixing a druti with mercury (drutime-lāpana; 2–12)²⁸ and the uses of these mixtures in making gold (57–58, 85–98) and silver (79–84), the preparation of vajrabīja (99–106) and its jāraṇa, which results in several types of vedha (107–149), and the preparation of another bīja which, after processing it, enables mercury to pervade all kinds of materials, even rocks and stones (giri, pāṣāṇa), changing them into gold (150–182).

Chapter nineteen (ratnādīgandhavādanadhanavardhana; 140 verses) describes how to make paste gems: padmarāga, indranīla, marakata, gomeda, puṣparāga, nīlamāṇikya (2–16), pearls (17–32),²⁹ and coral (33–40). Also described are the preparation of artificial cinnabar (41–45) and sindūra (46–54), the preparation of saindhava and suvarcala (55–59), the adulteration of hiṅgu (60–69), the making of artificial tin (70–74) and amlavetasa (75–78), the preparation of ink (maṣī; 79–80),³⁰ the adulteration of ghee (81–88), the preparation of fake sandal, camphor (karpūra), musk (kastūrī) and saffron (kuṅkuma) (89–119),³¹ the preparation of divyadhūpa (120–127), the extraction of fragrant substances from flowers (puṣpadruti; 128–131), and magical methods to increase the yield of the grain on the fields (dhānyavardhana; 132–139).

Chapter twenty (no title; 143 verses) gives an account of the bandha of mercury (2–49), the preparation of a mercurial bhasman (50–57), giving a mukha to baddha mercury (58–62), several methods of transmuting base metals into gold or silver (63–104), giving a mukhato lead (105–109), ways to soften (mṛdūkaraṇa) hard metals (110–114), the preparation of guhyasūta and its use (116–121), the preparation of guhyavaṅga and guhyānāga (122–129), three varieties of kāmadhanugūṭikā (130–137), some methods of changing silver, lead and sitasvarṇa into gold (138–141), and, finally, a method of making mercury able to digest mica (abhrakagrāsa; 142).

The Rasāyanakhaṇḍa

The *Rasāyanakhaṇḍa*³² (951 verses) is, as indicated by its title, especially devoted to rasāyana and allied subjects.

Chapter one (rasamāraṇa; 57 verses) introduces rasāyana and related topics (1–24); eleven methods of killing mercury are dealt with (25–55). The garbhayantra, employed in some of these methods, is also described (38cd–40).

Chapter two (divyarasadehasādhana; 140 verses) is concerned with the formulae of a number of rasayogas and their effects. Many of these rasas may not be found in earlier texts.³³

Chapter three (guṭikārasāyana; 221 verses) describes a series of miraculous pills (guṭikās and vaṭikās) to be employed in the saṃskāras called krāmaṇa and vedha, as well as for rasāyanapurposes. Some of these pills may be peculiar to the Rasāyanakhaṇḍa,³⁴ while some are also found in the *Rasakāmadhenu*, which may have borrowed them.

Chapter four (nānārasāyana; 115 verses) is concerned with various rasāyanas (1–43). This chapter also contains a number of kalpas: brahmavṛkṣa- (44–59), śvetapalāśa- (60–63), muṇḍī- (64–66), devadālī- (67–72), śvetārka- (73–75), hastikarṇa- (76–79), rudantī- (80–84ab), and nirguṇḍīkalpa (84cd–91).³⁵ This kalpa section is followed by rasāyana formulae (92–100), a śunakaśālmalikalpa (101–107ab), rasāyana formulae again (107cd–111), and verses on the addition of pāradabhasman to the preparations described, the mantra to be recited when using them, and rules concerning their employment (112–115).

Chapter five (udvartanakeśarañjana; 71 verses) contains formulae that remove wrinkles and turn grey hair black again (2–62ab); it ends with some recipes which whiten the hair (62cd–70).

Chapter six (vīryavardhana; 89 verses) consists of vājīkaraṇa formulae, in particular in the form of rasayogas (2–64ab).³⁶ The second part of the chapter is about vājīkaraṇa recipes in which the main ingredients do not consist of mercury or substances derived from it.

Chapter seven (vīryastambhanalīṅgavardhana; 73 verses) contains prescriptions which delay or suppress ejaculation and make the male member large, long and firm.

Chapter eight (śrīparvatasādhana; 185 verses) is about dehasiddhi and lohasiddhi; it describes how to acquire a divine body and turn base metals into gold. This interesting chapter mentions repeatedly the mountain called Śrīśaila and abounds from beginning to end in names of local deities and geographical names.

The Mantrakhaṇḍa

The *Mantrakhaṇḍa*³⁷ is arranged in seven subdivided chapters:³⁸ (1) sarvavaśyā-dipatīvaśya;³⁹ (a) sarvavaśya (subjugating all creatures), (b) rājavaśya (subjugating the king),⁴⁰ (c) strīvaśya (subjugating women),⁴¹ (d) līṅgalepana (anointing the penis), (e) strīdrāvaṇa (luring women), (f) pativaśya (subjugating one's husband); (2) ākarṣaṇādīstambhana: (a) ākarṣaṇa (attraction),⁴² (b) stambhana (immobilization),⁴³ (c) agnistambha (immobilizing fire), (d) jalastambhana (immobilizing water); (3) mohanādigṛhakleśanivāraṇa (averting the creation of confusion and domestic troubles): (a) mohana (delusion),⁴⁴ (b) uccāṭana (extirpation or eradication),⁴⁵ (c) māraṇa (killing),⁴⁶ (d) vidveṣaṇa (causing dissension),⁴⁷ (e) vyādhikaraṇa (causing illness),⁴⁸ (f) unmattākaraṇa (causing mental derangement), (g) ṣaṇḍhākaraṇa (causing impo-

tence), (h) bhagabandhana (sealing the vagina), (i) gṛhakleśanivāraṇa (averting evils from the house); (4) kautūhalāni (conjuring tricks); (5) yakṣiṇīśādhana (conjuring up a yakṣiṇī); (6) añjanāḍipādukāsādhana : (a) añjana (ointments), (b) adṛśya (invisibility), (c) pādukāsādhana (acquiring magic sandals); (7) mṛtasamjīvanādikakṣapuṭi: (a) mṛtasamjīvana (resuscitation),⁴⁹ (b) nirāhāra (fasting), (c) sāṅgopāṅgaprakāreṇa kakṣapuṭi (the *Kakṣapuṭi* in all its main and subsidiary parts).⁵⁰

This table of contents shows that the *Mantrakhaṇḍa* is chiefly concerned with *ṣaṭkarman*, the ‘Six Acts’ of Indian magic.⁵¹ It is closely related to Nāgārjuna’s *Kakṣapuṭa* and reproduces some of its verses and mantras. The subjects dealt with in both works are similar.⁵²

Some MSS of the *Mantrakhaṇḍa* may even contain the text of the *Kakṣapuṭa*, such as Cat. Madras Nr. 13202, which contains a text in twenty chapters (*paṭala*) with the following headings: (1) mantrasādhana, (2) sarvalokavaśītkaraṇa, (3) rājavaśya, (4) strīvaśya, (5) pativaśya, (6) ākarṣaṇa, (7) agnijalastambhana, (8) aśanistambhana,⁵³ (9) mohanoccātana, (10) māraṇavidhi, (11) vidveṣaṇādi, (12) mantrīkaraṇa,⁵⁴ (13) kautukavidhāna, (14) yakṣiṇīmantrasādhana, (15) sarvāñjanasādhana, (16) nidhigrahaṇa, (17) adṛśyakaraṇa, (18) pāclukāsādhana, (19) mṛtasamjīvinī, and (20) sāṅgopāṅgakaccha-putāprakarana.⁵⁵

One version of the *Kakṣapuṭa*⁵⁶ states in one of its introductory verses that the *Mantrakhaṇḍa* will be expounded; the arrangement of its contents is close to that of the Wellcome MSS of the *Mantrakhaṇḍa*.

The introductory verses of some texts of the *Mantrakhaṇḍa* refer to the same earlier works, in particular *Tantras*, as the opening verses of the *Kakṣapuṭa*.⁵⁷

Authorities and works quoted or mentioned in the *Rasaratnākara* and the glosses on the *Rasendrakhaṇḍa* are:⁵⁸ Agastya (II: visphoṭa 16–17), the Aśvins (II: raktapitta 52–59; śūla 33–40; kuṣṭha 264–268; amlapitta 68–79; pradara 12–17; yonivyādhi 9–16), Ātreya (II: vrajaśoṭha 17–25; kuṣṭha 110–117; pradara 23–29ab), Bhārgava (II: kuṣṭha 98–109), Bindusāra (II: raktapitta 34–35), Cakra⁵⁹ (II: vātavyādhi 161–164), Candranātha (II: śūla 77–85; kuṣṭha 217–226), Caraka (jvara 1–26 and 242–248; visarpa 17), Carpaṭisiddha (I.1.17),⁶⁰ Devadeva (II: śūla 24–32), Dhanvantari (II: pariṇāmaśūla 11–17), *Dīpikā* (I.1.16 and 27–30; 4.48–54),⁶¹ Gahanānanda (II: vātarakta 50–57 and 102–109; kuṣṭha 217–226), Gahananātha (II: udara 90–93; ślīpāda 56–65 and 66–70; kuṣṭha 230–231 and 232–235), Gorakṣanātha (IV.4.100), *granthāntara* (I.10.48–50; II: jvara 121–123, 282–285, 406–411; grahaṇī 45–53, 91–95, 109–116; pāṇḍuroga 79–82), *Haramekhālā* (II: pāṇḍuroga 83–85), *Haramekhalakagrantha* (introductory verses V),⁶² Hārītamuni (II: vātavyādhi 60–87; ślīpāda 33–41), Jatūkarṇa (II: gloss ad unmāda 22–25),⁶³ *Kācakarīśvarīmata* (introductory verses V),⁶⁴ Kāṅkāyana (II: gulma 12–18), Kāśyapa (II: cakṣūroga 58–63), Kesarin (II: vātarakta 91–95; āmavāta 50–60), *Kriyākālaguṇottara* (introductory verses V),⁶⁵ Kṛṣṇātreya (II: vātarakta 40–49), Mahādeva (II: vājīkaraṇa 93–101), Manthānabhairava (IV.3.197), Nāgārjuna (I.1.17; II: amlapitta 49–67; cakṣūroga 36–40; III.5.52), Nārada (II: arśas 75; yonivyādhi 38–45), Niścalakara (II: glosses ad pāṇḍuroga 29–36 and 41–43; sthāulya 27), *paragrantha* (II: ūrustambha 72–77), Punarvasu (II: bradhnāvṛddhi 19),

Rasahr̥daya (II: gandhakaśuddhi at the end of raktapitta), *Rasamaṅgala* (I.1.16),⁶⁶ *Rasaratnākara* (II: jvara 124–139 and 286–290; grahaṇī 54–61; mandāgni 53–55; gloss ad kāsa 82–87),⁶⁷ *Rasārṇava* (II: ūrustambha 61–69; introductory verses V),⁶⁸ *Rasendracūḍāmaṇi* (I.10.51–61),⁶⁹ *Śabdārṇava* (II: gloss ad vātavyādhī 161–164), *Śaivāsiddhānta* (II: vājīkaraṇa 179–186), *Śambhu* (I.1.16; II: viṣa 19–28; III.16.54 and 18.48), *Śaṅkara* (II: arśas 75–112; III.12.70), *Siddhamata* (I.9.47–53),⁷⁰ *Śiva* (III.1.8.183; IV.1.21ab), *Suśruta* (I.1.18; II: gloss ad vidradhi 20), *Tārā* (II: pariṇāma-śūla 28–33), *Trivikrama* (II: gloss ad pāṇḍuroga 41–43), *Trivikramadeva* (gloss ad pāṇḍuroga 29–36), *Uḍḍiṣatantra* (introductory verses V),⁷¹ *Vāgbhaṭa* (I.1.18; II: jvara 105),⁷² *Vāgbhaṭa* (I, prose between 10.69ab and cd), *Vaidyanātha* (II: grahaṇī 27–33), *Vaidyasāgara* (I.1.18), *Vāsudeva* (II: vājīkaraṇa 48–60), *Viṣṇu* (II: pradara 35–41; rasāyana 32–40), *Viśvāmitra* (II: kṣudraroga 39–45), *Yogamuktāvalī* (I.1.25–26 and 2.2),⁷³ *Yogarātnākara* (II: gandhakaśuddhi at the end of raktapitta; āmavāta 50–60), and *Yogarātnākaraśamuccaya* (II: gandhakaśuddhi at the end of raktapitta).

Works quoting from or referring to the *Rasarātnākara*⁷⁴ are: Ānandabhārati's *Ānandamālā*,⁷⁵ the pariśiṣṭas of the *Ānandakanda*, the *Āyurvedīya Khanijavijñāna*, Basava's *Śivatattvaratnākara*, Bhāvamīśra's *Bhāvaprakāśa*, Bheṣajasaṃhitā, Bṛhannighaṇṭurātnākara, Caturbhujā's commentary on the *Rasahr̥daya*, Gulrājśarmamīśra's commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, Hazārīlāl Sukul's commentary on the *Rasarātnasamuccaya*, Herambasena's *Gūḍhabodhakasaṃgraha*,⁷⁶ Jñārasarāma's version of the *Amṛtasāgara*, Khare's commentary on the *Rasarātnasamuccaya*, Kūpīpakvarasanirmāṇavijñāna, Mahādeva's commentary on the *Rasapaddhati*, Mallinātha's commentary on the *Amarakoṣa*, Meghamuni's *Meghavinoda*, Nīlakaṇṭha's *Basavarājīya*, *Pṛadasaṃhitā*, Rāmacandra's *Rāmavinoda*, *Rasadhātuprakāśa*, *Rasakakṣāpuṭa*, *Rasakāmadhenu*, *Rasarātnasamuccaya*, *Rasārṇavakalpa*,⁷⁷ *Rasasindhu*,⁷⁸ *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasāyanasaṃgraha*, *Rasayogasāgara*, *Rasendrakalpadruma*, *Rasendrasambhava*, *Rasoddhāratana*, the bhasmapīṣṭiprakaraṇa of the *Rasoddhāratana*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasarātnasamuccaya*, Devendranātha and Upendranātha Senagupta's *Āyurvedasaṃgraha*, Somadevaśarman's commentaries on the *Āyurvedaprakāśa*, *Ṭoḍara's Āyurvedasaukhya*, Trimalla's *Bṛhadyogatarāṅgiṇī*, *Vaidyakaṃgraha*, Vinodalāla Sena's *Āyurvedavijñāna*, and *Yogarātnākara*.

Verses from the *Rasarātnākara* form part of the *Ānandakanda* and *Rasajalanidhi*.

The *Rasarātnākara* was one of the sources of the *Ma'din al-Ṣhifā'*.⁷⁹

A *Ratnākara* that may or may not be Nityanātha's *Rasarātnākara* is quoted or referred to in *Ṭoḍara's Āyurvedasaukhya*,⁸⁰ the *Rasendrakalpadruma*, the *Śāligrāmanighaṇṭu*, and *Vaidyacinātmaṇi's Prayogāmṛta*.

Nityanātha is quoted or mentioned in *Ānandabhārati's Ānandamālā*, the *Bheṣajasaṃhitā*, Caturbhujā's commentary on the *Rasahr̥daya*,⁸¹ Dattarāma's *Rasārājasundara*,⁸² Dattātreya's *Rasacandāmaṇi*,⁸³ Deveśvara's *Rasendraratnaḥ*,⁸⁴ Govindarāma's *Rasaṃgrahasiddhānta*,⁸⁵ Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, the *Haṭhayogapradīpikā*, Hazārīlāl Sukul's commentary on the *Rasarātnasamuccaya*, Herambasena's *Gūḍhabodhakasaṃgraha*, the *Kāmaratna*, Khare's commentary

on the *Rasaratnasamuccaya*, the *Lakṣmaṇotsava*, Mādhava's *Āyurvedaprakāśa*, the *Nṛsiṃghanidāna*, the *Pāradasaṃhitā*, Raghunātha's *Sārasaṃgraha*, Rāmakṛṣṇa's *Rasārājaśaṃkara*,⁸⁶ Rāmanātha's *Yogamahārṇava*,⁸⁷ Rāmasena's *Rasasārāṃṛta*, the *Rasaratnadīpikā*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrakalpadruma*,⁸⁸ *Rasendrasārasaṃgraha*, Śālagrāma's *Dhanvantari*,⁸⁹ Śālinātha's *Rasamañjarī*,⁹⁰ Ṭoḍa-
ra's *Āyurvedasaukhya*, and Trimalla's *Brhadhyogataraiṅgiṇī*.⁹¹

The *Rasaratnākarakṛt* is quoted in the *Āyurvedaprakāśa*.

Nityanāthasiddha is mentioned in Brahmānanda Bhāratī's *Puruṣārthaprabodha*,⁹² Raghunātha's *Sārasaṃgraha*, and Śrīnivāsa's *Haṭharatnāvalī*.⁹³ A work called *Nityanāthīya* is quoted in the *Basavarājīya*.

Special features

The Rasakhaṇḍa

Eight doṣas of mercury are distinguished: nāga, vaṅga, mala, vahni, cāñcalya, viṣa, giri, and asaḥyāgni (1.27–29ab), although seven kañcukas are also referred to (2.9).

Chapter two enumerates the plants, plant products and some other substances employed in the killing of mercury (māraṇauśadhi): amṛtā, ardhacandrikā, arka, balā, bhṛṅgarāj, bhūkadamba, brahmadaṇḍī, cakramarda, caṇḍālīnī, citraka, devadālikā, gokṣura, hastiśuṇḍī, jātī, jayantī, kākamācī, kākaturṇḍikā, kanda, kanyā, kaṭutumbī, ko-
ṣātakī, kuraṇṭaka, lajjālī, lākṣā, lāṅgalī, meghanādā, nīrakaṇā, paṭu, raktāgraniriguṇḍī, ravipriyā, saḥadevikā, śarapuñkhikā, sarpākṣī, snuh, śuṇṭhī, ṭṇamustikā, vajravallī, vārāhī, vastā, viṣamuṣṭī, and viṣṇukrāntā (2.15–20).

Chapter three contains a list of the niyāmaka plants and substances: ahaskara, ākhuṣparṇikā, bhṛṅgarāj, brahmadaṇḍī, ciñcikā, citraka, dhattūra, grīṣmasundara, guḍūcī, haṃsapadī, haridrā, haritakī, hastiśuṇḍī, hiṅgu, indravāruṇī, kākajaṅghā, kākamācī, kañcukī, kokila, kṣīrīṇī, kuñcī, kuraṇṭaka, mahārāṣṭrī, māṅṣika, maṇḍū-
kaparṇī, matsyākṣī, mayāṅkā, mṛgadūrvā, muṇḍī, mūrvā, mūṣalī, padmaka, pātālī, pota, puñkhā, raktacitraka, saindhava, sām̐bhara, śarapuñkhikā, sarpākṣī, śatāvarī, śigru, śikhiśikhā, somavallī, sūraṇa, svayambhūkusuma, śvetārka, śvetavarṣābhū, tagara, tilakarṇikā, triparṇikā, utpala, vajrakandā, vajralatā, vandhyā, varṣābhū, viṣṇukrāntā, vṛṇaghaṇḍī, vṛṣcikālī, vyāghrapādī, and yakṣalocana (3.34–41).

Chapter ten mentions eight poisonous plants that may be used by a physician: kū-
rma, mustaka, saktuka, sarṣapāhvaya, śṛṅgī, śvetaśṛṅgī, vālaka, and vatsanābha; ten poisonous substances are to be avoided: dardura, granthi, hālāhala, hāridra, kālākūṭa, karkaṭa, keśava, markāṭa, meṣaśṛṅgī, and raktaśṛṅgaka. (10.38–40). The *sālasārādiga-
ṇa*, employed in bhāvanā, consists of aguru, arjuna, asana, the two types of candana, dhava, gardabhāṇḍa, kāliya, the two types of karañja, karkaṭa, khadira, the two types of lodhra, pūga, pūtika, the two types of sāla, and śīrīṣa (10.69–71).

Some noteworthy names of plants occurring in the *Rasakhaṇḍa* are: kākamañjarī (3.26), kāntamukha (5.37), kova (5.28), and nāgavandhyā (5.39).

The Rasendrakraṇḍa

The arrangement of the diseases in the *Rasendrakraṇḍa* largely agrees with the *Mā-*

dhavanidāna, apart from the addition of *jvarātīsāra*, *jaratpittaśūla*, *urograha*, *bradhna*, *snāyuka*, *somaroga*, and *rasājīrṇa* to the list of Mādhava's diseases; separate chapters on *pānātyaya*, *yonikanda*⁹⁴ and *mūḍhagarbha* are absent. The chapter on *urograha* is identical with the chapter on this disease in Vaṅgasena's *Cikitsāsārasaṃgraha*; the verses on *somaroga* are partly the same as those in Vaṅgasena's work. The chapter on women's diseases has verses on the prognostic significance of the day of the week on which a woman begins to menstruate (38–45)⁹⁵ and on the development of the embryo (80–85); it contains specific recipes against *śūla* in each of the ten months of pregnancy (99–116) and verses on eight malpositions (126–127). The chapter on children's diseases mentions disorders called *cora* (16–19) and *paścādruja* (48). The chapter on poisoning enumerates twenty-five poisons of vegetable origin (19–28).

Some noteworthy names of plants mentioned in the *Rasendrakhaṇḍa* and its glosses are: *ābhā* (*bhagna* 7), *āhā* (*vātavyādhi* 39), *balāhaka* (*jvara* 180; gloss: = *mustaka*), *cāraṭī* (*unmāda* 22; gloss: = *kumbhāḍu*), *celaka* (*vātavyādhi* 135; gloss: = *guvākatvac*), *coraka* (*unmāda* 22; gloss: = *corahelī*),⁹⁶ *dahanaviṭapī* (*nāsāroga* 85; gloss: = *lāṅgalī*), *gauraharidrā* (*śārīravraṇa* 11; gloss: = *dāruharidrā*), *kuṭhāraka* (*śārīravraṇa* 20), *lāṅgalīdvaya* (*unmāda* 23; gloss: = *rāsnā* and *gandharāsnā*), *malapū* (*bhagandara* 2; gloss: = *kr̥ṣṇodumbara*), *pāṣāṇa* (*aśmarī* 4; gloss: = *kulattha*), and *surāṅgī* (*karṇāroga* 3; gloss: = *raktaśobhāñjana*).

The Vādikhaṇḍa

The *Vādikhaṇḍa* enumerates six substances called *śakti*: *vajra*, *vaikrānta*, *vajrābhra*, *kāntapāṣāṇa*, *ṭaṅkaṇa*, and *bhūnāga* (1.56). The *uparasas* consist of: *gandha*, *tālaka*, *kāsisā*, (*manah*)*śilā*, *kaṅkuṣṭha*, *bhūkhaga*, *rājāvarta*, and *gairika* (1.57).⁹⁷ The *mahārasas* are *rasaka*, *vimalā*, *tāpya*, *capalā*, *tuttha*, *añjana*, *hiṅgula*, and *sasyaka* (1.58–59ab).⁹⁸

The names of the twenty-seven *Rasasiddhas* are: *Bali*, *Bāṇāsura*, *Candrasena*, *Carpaṭi*, *Govinda*,⁹⁹ *Hara*, *Indradyumna*,¹⁰⁰ *Kāmalin*,¹⁰¹ *Kāpālika*, *Kapila*, *Khaṇḍa*, *Lampaṭa*, *Loka*,¹⁰² *Māṇḍavya*, *Nāgabuddhi*, *Nāgārjuna*, *Naravāhana*, *Ratnaghoṣa*, *Śambhu*, *Śārada*, *Subuddhi*, *Surānanda*, *Śūrāsenaka*,¹⁰³ *Tāttvika*,¹⁰⁴ *Vāḍava*,¹⁰⁵ *Vyālācārya*, and *Yaśodhara* (1.66–70).¹⁰⁶

The group of divine drugs (*divyaauśadhi*) is composed of *agnidamanī*, *ajakarnī*, *ajāmārī*, *ākḥukarnī*, *aṅkola*, *apāmārga*, *arka*, *badarī*, *bākucī*, *balā*, *bhūkadamba*, *bhūmipāṭalī*, *bilva*, *brahmadaṇḍī*, *brāhmī*, *bṛhatī*, *cakramarda*, *caṇā*, *cāṇḍālī*, *candralatā*, *cāṅgerī*, the three kinds of *citraka*, *devadālī*, *ekavīraka*, *eraṇḍa*, *garuḍī*, *ghanā*, *gojivhā*, *gorambhā*, *guñjā*, *haṃsapālī*, *hastimūlikā*,¹⁰⁷ *hemavallī*, *hiṅgu*, *indravāruṇī*, *jalakumbhī*, *jātī*, *jayā*, *kadalī*, *kākajaṅghā*, *kākamācī*, *kākatuṇḍikā*, *kalikā*, *kāñcānana*, *kaṅguṇī*, *kanyā*, *kāravallī*, *karavīra*, *kārpāsa*, *kaṭutumbī*, *khaṇḍajārī*, *kokilākṣaka*, *kośātakī*, *kr̥ṣṇadhattūra*, *kr̥ṣṇajīrā*, *kr̥ṣṇatulasī*, *kṣīrakandaka*, *kukkutī*, *kumbhī*, *lajjarī*, *lākṣā*, *lakṣmaṇā*, *lāṅgalī*, *mahābalā*, *mahārāṣṭrī*, *maṇḍūkaparṇikā*, *mañjiṣṭhā*, *markaṭī*, *maruvaka*, *meghanāda*, *meṣaśṛṅgī*, *mīnākṣī*, *muṇḍī*, *mūrvā*, *muśalī*, *nāgabalā*, *nāgavallikā*, *nīlī*, *niśā*, *padmacārīṇī*, *palāśa*, *pātālagaruḍī*, *pathyā*, *peṭārī*, *pīluka*, *pūgī*,¹⁰⁸ *śvetā* and *raktā* *punarnavā*, *pūṅkhā*, *puṣkaramūlaka*, *raktasnuhī*, *rambhā*, *rudantī*, *sahadevikā*, *saindhava*, *śākavṛkṣa*, *śamī*, *śaṅkhaṇḍī*, *saṅgapa*, *sarpākṣī*, *śatāvārī*, *śikhiśikhā*, *sinduvārikā*, *snuhī*, *somalatā*, *suṇṭhī*, *sūraṇa*, *sūryavartaka*, *svaṇapūṣpī*,

śvetāparājītā, tilaparnī, triparṇikā, udumbara, vacā, vajralatā, vāla,¹⁰⁹ vanarājaka, vanasūraṇa, vandhyākarkoṭakī, vartulapattrakā, vijayā, viṣamuṣṭi, viṣṇukrāntā, vṛścīkālī, vyāghranakhī, yavaciñcī, all the kṣīravṛkṣas, and the various kinds of poisonous substances (2.14cd–28).

The plants called siddhamūlikā, used in the jāraṇa of mica, are: agni, agnimathanī, bṛhatī, haṃsapādī, indravāruṇī, kadalī, khaṇḍajātī, kumārikā, lāṅgalī, maṇḍūkī, mūṣā, śaṅkhaṇḍikā, sarpaṅgī, vajrī, vandhyākarkoṭakī, and vyāghrapādī (12.53–54).

A cakrayantra (6.75cd–76ab) and gaurīyantra (15.103; 16.115) are referred to. (Anu)vāsana is regarded as a distinct saṃskāra (11.35). Eight varieties are described of māṅśikasattva: resembling guṇjā (seeds),¹¹⁰ indragopa, a gem (maṇi), śukatuṇḍa (the beak of a parakeet), śulba (copper), kiṃśuka flowers, and lākṣā (lac), and, finally, a variety called dhautā (washed) (13.22–36). Two varieties of manāṣīlāsattva are distinguished: resembling gold and the rays of the sun in the early morning (13.37–41). Four varieties of capalā are mentioned: red, yellow, white, and black (16.90).

Some interesting names of plants are: bhūmyapāmārga (12.45), karuṇī (6.70), kuḍhuṇjīkā (4.33), mahindī (9.67), muruṇḍī (11.15), nāgakanyā (10.17), teṇṭū (8.45), vasantapuṣpikā (8.22), vasubhadra (20.112), vasubhaṭṭa (20.92), and vegī (17.30).

The Rasāyanakhaṇḍa

The *Rasāyanakhaṇḍa* describes in its first chapter dietary and behavioural rules to be observed prior to and during the use of mercurial preparations for rasāyana purposes. One of the requirements consists of the removal of loṇa- and amladoṣa, caused by the consumption of salty (lavaṇa) and sour (amla) articles of food (1.4–6ab). Paying homage to the Kumārīs¹¹¹ and Yoginīs¹¹² is also recommended (1.8).

The ritual connected with the consumption of kālāntarasa prescribes sexual intercourse with a menstruating woman and the collection of the mixture of male and female procreatory fluids (rajobīja) that is called gagana (3.197cd–199ab).

The consumption of fishes that can live on wet soil (vālukāṃatsya, vālukāmīna, sthālamīna)¹¹³ is repeatedly recommended for their aphrodisiac properties (6.80; 7.38). They are found on the shore of the Western ocean, near the Amaracaṇḍeśvara temple (prose between 7.38 and 39). Pills in the form of leeches (jalaukā) are employed in order to suppress ejaculation during intercourse (7.39–55).

Geographical names and names of deities connected with particular localities, mentioned in chapter eight, are: Acaleśa (154: a mountain), Acchataīla (133: a mountain), Alampura (63, 64: a town),¹¹⁴ Amareśvaradeva (155),¹¹⁵ Āvartadeva (36), Bhīmāpāṇḍuka (63: a village), Bhṛgupātana (129, 132), Brahmeśvareśvara (56), Caṇḍikā (58, 168), Candraguptaprākāra (135), Chelikā (122), Gaṇeśvara (108), Ghaṇṭāsiddheśvara (5, 9), Guṇḍiprabhā (144: probably a mountain), Guṭikāsiddhakeśvara (182), Hastīśilā (41),¹¹⁶ Hastīśiras (42), Ileśvara (153),¹¹⁷ Īśvara (71), Jāleśvara (33),¹¹⁸ Kadambēśvaradeva (116), Kākalerī (176: a forest), Kālavarnēśvara (148), Kokilābila (24), Koṭīśvara (153),¹¹⁹ Kuṇḍaleśvara (38, 120),¹²⁰ Liṅgaparvata (166: a mountain),¹²¹ Mahānandeśvara (147), Maheśa (67), Mallikārjuna (2, 129, 135, 173),¹²² Mallinātha (5, 10),¹²³ Maṇipalli (20: a village), Maukalī (89: a Yakṣiṇī), Nandana (87, 94, 96, 98, 99, 100: a forest),¹²⁴ Nilavana (142: a forest), Paramēśvara (85),

Paṭāhakarṇa (159), Pindādevī (169), Puruṣeśvara (39), Puṣpagiri (121: a mountain),¹²⁵ Rāmeśvara (35),¹²⁶ Śaila (182),¹²⁷ Śailārāja (159),¹²⁸ Śambhu (1, 185), Sarveśvara (173), Śiva (43), Śrīgiri (185),¹²⁹ Śrīśaila (8, 14, 33, 56, 67, 140, 144, 147, 149, 158, 184),¹³⁰ Sureśvara (33), Svargapurī (29), Tambīpura (146),¹³¹ Tripurāntakadeva (14, 19, 24, 29, 31),¹³² Turaleśvara (149), Umāparvata (150: a mountain), and Yogeśvarī (64).

The Rasāyanakhaṇḍa contains a rather large number of mantras.¹³³

Some noteworthy names of plants are: Īśvaralingī (7.23), munimūḍikā (5.2), riṭṭhaka (8.40), and vajrakāpālī (5.5). An interesting substance is sābhuṇa (5.29).¹³⁴

The author

The author mentions his name as Nityanātha (I.1.25). The colophons of the MSS and editions call him Nityanātha or Nityanāthasiddha,¹³⁵ son of Pārvatī.¹³⁶ More information is not available.¹³⁷

The author refers to his teacher (I.1.22; III.19.140; 20.62) without disclosing his name.

Nityanātha is regarded as one of the Rasasiddhas.¹³⁸

Works ascribed to Nityanātha, apart from the *Rasaratnākara*, are: (1) *Indrajālaka-utka*;¹³⁹ (2) *Kakṣapuṭa*;¹⁴⁰ (3) *Kakṣapuṭīvidyā*;¹⁴¹ (4) *Kāmaratna*;¹⁴² (5) *Kāmaratnatantra*;¹⁴³ (6) *Kautūhalavidyā*;¹⁴⁴ (7) *Mantrasāra*;¹⁴⁵ (8) *Nityanāthatantra*;¹⁴⁶ (9) *Nityanāthīya*;¹⁴⁷ (10) *Rasaratnamālā*;¹⁴⁸ (11) *Rasaratnasamuccaya*;¹⁴⁹ (12) *Śabaracintāmaṇi*;¹⁵⁰ (13) *Siddhasiddhāntapaddhati*;¹⁵¹ (14) *Siddhisāvara*;¹⁵² (15) *Tantrakośa*;¹⁵³ (16) *Vandhyāvalī*;¹⁵⁴ (17) *Yogasāra*.¹⁵⁵ G. Hāldār¹⁵⁶ associates Nityanātha with the *Aśvinikumārasaṃhitā*.

Some formulae ascribed to Nityanātha are: *gulmavajriṇīvaṭī*¹⁵⁷ and *kāmeśvaramodaka*.¹⁵⁸

An authority called Siddhanātha may be the same as Nityanātha. The *Kāmaratna* and *Yogasāra* are sometimes ascribed to him. Siddhanātha is quoted in the *Aṣṭamahāmātrā*. He is credited with some formulae: *divyaraśāyana*,¹⁵⁹ *lokanāyakarasa*¹⁶⁰ and *udayabhāskararasa*.¹⁶¹

Date

Nityanātha's *Rasaratnākara* has been assigned to the period between the third century B.C. and the fourth century after Christ,¹⁶² the twelfth,¹⁶³ twelfth or thirteenth,¹⁶⁴ thirteenth,¹⁶⁵ thirteenth or fourteenth,¹⁶⁶ fourteenth,¹⁶⁷ and fifteenth century.¹⁶⁸ D.G. White expressed as his opinion that Nityanātha lived slightly later than Gorakṣanātha but earlier than the author of the *Bhūtiprakaraṇa* of the *Gorakṣasaṃhitā*, in the late thirteenth century.¹⁶⁹

This uncertainty concerning the chronological position of the work can be cleared up by taking into consideration the works and authors mentioned in it and those referring to it. The reference to Gorakṣanātha indicates that the *Rasaratnākara* is later than the thirteenth century, the reference to the *Kākacāṇḍeśvarīmata* that it is posterior to

about A.D. 1400. Nityanātha's work was well known in the sixteenth century, as appears from references to and quotations from it in Ānandabhāratī's *Ānandamālā*, Bhāvamiśra's *Bhāvaprakāśa*, Ṭoḍara's *Āyurvedasaukhya*, and Miyān Bhūwah's *Ma'din al-Ṣhifā'*. Nityanātha's date can be pushed back further because he was known to Gopālakṣṇa, the author of the *Rasendrasārasaṅgraha* (last quarter fifteenth century) and to the author(s) of the *Lakṣmaṇotsava* (A.D. 1449/50).

The evidence points to the first half of the fifteenth century as the period of composition of Nityanātha's *Rasaratnākara*. This dating is supported by the earliest MS of the work, completed in A.D. 1473.¹⁷⁰

Chapter 9

Rasaratnasamuccaya

The *Rasaratnasamuccaya* by Vāgbhaṭa¹ is an extensive manual of alchemy and iatro-chemistry.

Contents²

The work consists of about 3,870 verses, arranged in thirty chapters (adhyāya); it can be divided into two parts: chapters one to eleven, dealing with alchemy, and chapters twelve to thirty, devoted to the treatment of diseases (iatrochemistry).

Chapter one (rasotpatti; 88 verses) begins with a maṅgala addressed to Śiva as the foremost physician of the world (jagatpradhānabhiṣaj) (1). It proceeds with an enumeration of the twenty-seven Rasasiddhas and a series of authors on rasaśāstra, whose works were studied by the compiler of the *Rasaratnasamuccaya* (2–8). These verses are followed by a description of the Himālaya and the abode of Śiva (10–21). The remaining subjects of the chapter are: the praise of mercury (22–41),³ its ability to bestow jīvanmukti (42–59),⁴ its origin (60–66),⁵ its names and varieties (67–79), the five gatis of mercury and their removal (80–87), and the origin of cinnabar (88).⁶

The subjects of chapters two to ten are: the mahārasas (2; 163 verses),⁷ uparasas (3; 158 verses),⁸ ratnas (4; 84 verses),⁹ lohas (5; 243 verses),¹⁰ the initiation of a pupil (6: śiṣyopanayana; 64 verses),¹¹ the laboratory (7: rasaśālā; 37 verses),¹² technical terms (8: paribhāṣā; 101 verses),¹³ yantras (9; 87 verses),¹⁴ mūṣās, koṣṭhīs, puṭas and groups of substances (10; 97 verses).¹⁵

Chapters two to five, seven, eight and ten are for the greater part borrowed from the *Rasendracūdāmaṇi*.

Chapter eleven (135 verses)¹⁶ describes two systems of weights (mānaparibhāṣā; 1–13), lists the eighteen saṁskāras (14–16), deals with the doṣas of mercury (20–25), and gives an account of a number of saṁskāras and related subjects (29–135). These saṁskāras and related subjects are: svedana (29), mardana (30–33), mūrchana (34–35), utthāpana (36), pātana (37–46), rodhana (48), niyāmana (49), dīpana (50–52), the rasamūlikā plants (53–59), bandha (60–107), strīdrāvaṇa (108–112), killing (māraṇa) of mercury (113–121), the uses of the ashes (bhasman) of mercury (122–127), two series of kakāras (128–130),¹⁷ and the treatment of disorders caused by mercurial preparations (132–135).

Chapters twelve to twenty-five deal with the aetiology, symptomatology and treatment, in particular by means of rasayogas, of a long series of diseases, arranged in a partly unprecedented way.¹⁸ Chapter twenty-six (59 verses) is devoted to rasāyana,

chapter twenty-seven (144 verses) to vājīkaraṇa.

Chapter twenty-eight (lohakalpa; 104 verses) describes thirty-six different lohakalpas, preceded by verses on the purification and killing of the metals (loha) used in these kalpas. Chapter twenty-nine (viṣakalpa; 160 verses), in the form of a dialogue between Śiva and Pārvatī, deals with the mythical origin of poison (1–9), thirteen poisonous substances of vegetable origin (10–19), the uses of poisonous substances (20–50), and one hundred and eighteen viṣakalpas (51–159). Chapter thirty (rasakalpa; 138 verses) is concerned with the jāraṇa (1–11) and killing (12–21) of mercury, the uses of its ashes (bhasman) in eighty-six rasakalpas (22–114), and the praise of the expert physician (115–137).

Sources are rarely referred to by the author.¹⁹ The *Rasārṇava* is mentioned at the end of the verses on weights of chapter eleven (11.13). The two series of kakāras of chapter eleven were taken from the *Devīśāstra* (11.128–129) and from a work by Śrī-kṛṣṇadeva (11.130). Some of the verses borrowed from the *Rasendracūḍāmaṇi* contain the name of its author, Somadeva;²⁰ verses with the names of authorities, referred to by Somadeva, are often left out.²¹ One method of killing diamonds is attributed to Somaśenānī (4.38–40). Rāmarāja's *Rasaratnapradīpa*²² and the *Rasaratnākara*²³ are quoted according to some of the editors of the *Rasaratnasamuccaya*.

Names of divinities and other authorities associated with particular formulae occur repeatedly in the chapters on treatment; noteworthy are the names of Ātreya,²⁴ Bhāluki,²⁵ Nāgārjuna,²⁶ Nityānātha,²⁷ and Suśruta.²⁸

In spite of the author's silence on the works he consulted and from which he borrowed, some of the sources can be identified.²⁹ The *Rasahrdaya* was used in the composition of chapter one.³⁰ Chapters two to five are mostly from chapters ten to twelve and fourteen of the *Rasendracūḍāmaṇi*.³¹ Chapter six has been taken from the Vādikhaṇḍa of the *Rasaratnākara*.³² Chapters seven and eight correspond to chapters three and four of the *Rasendracūḍāmaṇi*.³³ Chapter nine has a composite structure; it consists of borrowings from the *Rasārṇava*, *Rasendracūḍāmaṇi*, and some other, unidentified, texts.³⁴ Large parts of chapter ten are from chapters five and nine of the *Rasendracūḍāmaṇi*.³⁵ Some portions of chapter eleven derive from the *Rasārṇava* and *Rasaratnākara*.³⁶

A remarkable feature of the nidāna verses of chapters twelve to twenty-five is that they are not borrowed from the *Mādhavanidāna*, but from some so far unidentified source.

Works quoting from or referring to the *Rasaratnasamuccaya* by name are: Ambikādaśāstrin's commentary on the *Rasendrasārasaṃgraha*, the parīśiṣṭas of the *Ānandakanda*, the commentary on the *Aṣṭamahāmātrā*, the *Āyurvedīya Khanijavijñāna*, the *Bhāvaprakāśa*,³⁷ the *Bheṣajasaṃhitā*, the *Bṛhadrasarājasundara*, Devendra-nātha and Upendranātha Senagupta's *Āyurvedasaṃgraha*, Gulrājśarmamiśra's commentary on the *Āyurvedaparakāśa* and the same author's *Viśikhānupraveśavijñāna*, Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, Lakṣmīrāma's commentary on the *Siddhabheṣajamaṇimālā*, Mādhava's *Āyurvedaparakāśa*, Mahādeva's commentary on the *Rasapaddhati*, Narendranāthamitra's *Capalanirṇaya* (in the *Rasataraṅgiṇī*), the *Pāradasaṃhitā*, *Rasadhātuprakāśa*, *Rasakāmadhenu*, *Rasamitra*, *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasayogasāgara*, *Rasendrakalpadruma*, *Rasoddhātatantra*, *Ra-*

tnākaraṣadhayogagrantha, Śivadatta's auto-commentary on the *Śivakoṣa*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, the *Vaidyakasaṃgraha*, Yādavaḥ Trikamaji's *Rasāmṛta* and *Siddhayogasamgraha*, the *Yogaratanākara*, and Cat. Madras Nr. 13198.³⁸

The *Rasaratnasamuccaya* was one of the sources of *Āyurvedaprakāśa*, *Kūpīpakvarasanirmānavijñāna*, *Rasavidyāmahārṇava*, and *Rasendrasambhava*.

The author of the *Rasaratnasamuccaya* is quoted as Rasavāgbhaṭa in the *Āyurvedābdhisāra*, Guṛārjśarmamiśra's commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Mādhava's *Āyurvedaprakāśa*, Mahādeva's commentary on the *Rasapaddhati*, and the *Rasakāmadhenu*.³⁹ He is cited as Vāgbhaṭa in Mādhava's *Āyurvedaprakāśa*.

The *Rasaratnasamuccaya* is quoted anonymously in the *Rasajalanidhi* and *Rasendrapurāṇa*.

Special features

The names of the twenty-seven Rasasiddhas⁴⁰ mentioned in chapter one of the *Rasaratnasamuccaya* are:⁴¹ Ādima,⁴² Bhāskara,⁴³ Brahmā,⁴⁴ Candrasena,⁴⁵ Gomukha,⁴⁶ Govinda,⁴⁷ Hari,⁴⁸ Indrada,⁴⁹ Kambali,⁵⁰ Kāpālika,⁵¹ Kapālin,⁵² Khaṇḍa,⁵³ Lampaka,⁵⁴ Lankeśa,⁵⁵ Māṇḍavya,⁵⁶ Matta,⁵⁷ Nāgabodhi,⁵⁸ Nāgārjuna,⁵⁹ Naravāhana,⁶⁰ Ratnakośa,⁶¹ Śambhu,⁶² Śāttvika,⁶³ Surānanda,⁶⁴ Śūrasenaka,⁶⁵ Viśārada,⁶⁶ Vyāḍi,⁶⁷ and Yaśodhana⁶⁸ (1.2–5ab).

The list is followed by the names of authors on rasaśāstra whose works were consulted by the son of Siṃhagupta, who wrote the *Rasaratnasamuccaya*. The authors mentioned⁶⁹ are: Bhairava,⁷⁰ Bhāluki,⁷¹ Hariśvara,⁷² Kākacaṇḍīśvara,⁷³ Mahādeva,⁷⁴ Maithilāhvaya or Maryalāhvaya,⁷⁵ Manthānabhairava,⁷⁶ Nandin,⁷⁷ Narendra,⁷⁸ Rasānkuśa,⁷⁹ Rasendratilaka,⁸⁰ Rṣiṣṛṅga,⁸¹ Svachchandabhairava,⁸² Vāsudeva,⁸³ and Yogin⁸⁴ (1.5cd–8).

The second list of twenty-seven Rasasiddhas (6.51–55), borrowed from the *Rasaratanākara* (III.1.66cd–71ab),⁸⁵ consists of: Āgama,⁸⁶ Bali,⁸⁷ Bāṇāsura,⁸⁸ Candrasena,⁸⁹ Carpaṭi,⁹⁰ Govinda,⁹¹ Indradhūma,⁹² Kāmāri,⁹³ Kāpālika,⁹⁴ Kapila,⁹⁵ Khaṇḍa,⁹⁶ Lampaka,⁹⁷ Lanāka,⁹⁸ Māṇḍavya,⁹⁹ Muniśreṣṭha,¹⁰⁰ Nāgabuddhi,¹⁰¹ Nāgārjuna,¹⁰² Naravāhana,¹⁰³ Ratnaghoṣa,¹⁰⁴ Śambhu,¹⁰⁵ Śārada,¹⁰⁶ Subuddhi,¹⁰⁷ Surānanda,¹⁰⁸ Śūrasenaka,¹⁰⁹ Tāntrika,¹¹⁰ Vyālācārya,¹¹¹ and Yaśodhana.¹¹²

Five gatis of mercury are described: jalaga, haṃsaga, malaga, dhūmaga, and jīvagati; the first four are visible, whereas jīvagati is invisible (1.81–83). The eight mahārasas are: abhraka, vaikrānta, māḥṣīka, vimala, adrija (= śilājatu), sasyaka, capala, and rasaka; rājāvarta, included in this group in the *Rasendracūḍamaṇi*, is omitted, while capala has been added (2.1); māḥṣika or tāpya is described as found along the river Tāpī and in the countries of the Cīnas, Kirātas and Yavanas (2.73). The eight uparasas consist of: gandhāśman (= gandhaka), gairika, kāsisa, kārikṣī, (harit)āla, (manah)śilā, añjana, and kaikuṣṭha (3.1); the eight sādghāṇarasas are: kampilla,¹¹³ gauripāṣāṇa, navasāraka, kaparda, vahnijāra, girisindūra, hirigula, and mṛddāraśṛṅga (3.126–127). Rājāvarta is regarded as one of the ratnas (4.75–81).

Chapter eleven discusses two systems of weights (11.1–13), the second of which is related to the Māgadhā system of āyurveda.¹¹⁴

The eighteen *saṃskāras* enumerated are *svedana*, *mardana*, *mūrchanā*, *utthāpana*, *patana*, *rodha*, *niyāmana*, *saṃdīpana*, *gaganabhakṣaṇamāna*, *saṃcāraṇa*, *garbhadruti*, *bāhyadruti*, *jāraṇa*, *grāsa*, *sāraṇa*, *saṃkrāmaṇa*, *vedha*, and *śarīrayoga* (11.14–16). The first eight *saṃskāras*, necessary for the preparation of medicinally useful substances, are described in more detail; the last ten *saṃskāras*, necessary for aurification, are neglected. Twelve *doṣas* of mercury are distinguished: three *naisargikadoṣas*: *viṣa*, *vahni*, *mala*; two *yaugikadoṣas*: *nāga* and *vaṅga*; seven *aupādhikadoṣas* or *kañcukas*: *parpaṭī*, *pāṭanī*, *bhedī*, *drāvī*, *malakārī*, *andhakārī*, and *dhvāṅkṣī* (11.20–24).

Twenty-five types of *bandha* of mercury are distinguished; a twenty-sixth type, called *jalūkābandha*, recognized by some authorities, is added (11.60–64). The twenty-five types are:¹¹⁵ *haṭha*-,¹¹⁶ *āroṭa*-,¹¹⁷ *ābhāsa*-,¹¹⁸ *kriyāhīna*-,¹¹⁹ *piṣṭikā*-,¹²⁰ *kṣāra*-,¹²¹ *khoṭa*-,¹²² *poṭa*- or *parpaṭī*-,¹²³ *kalka*-,¹²⁴ *kajjalī*-,¹²⁵ *saṃjīva*-,¹²⁶ *nirjīva*-,¹²⁷ *nirbīja*-,¹²⁸ *sabīja*-,¹²⁹ *śrīṅkhālā*-,¹³⁰ *druti*-,¹³¹ *bāla*-,¹³² *kumāra*-,¹³³ *taruṇa*-,¹³⁴ *vṛddha*-,¹³⁵ *mūrti*-,¹³⁶ and *mahābandha*¹³⁷ (11.65–89). The *jalūkābandha* is elaborately described (11.93–107).¹³⁸

The diseases, the treatment of which is dealt with in chapters twelve to twenty-five, are enumerated in the introductory verses of chapter twelve (12.1–8):¹³⁹ *jvara*, *raktapitta*, *kāsa*, *śvāsa*, *hidhnmā*, *vaisvaryā* (= *svarabheda*), *kṣaya* (= *rājayakṣman*), *aroca*, *praseka*, *chardi*, *hṛdroga*, *trṣṇā*, *madyodbhava* (= *madātyaya*), *arśas*, *udāvarta*, *atisāra*, *grahanyartī*, *pravāhin*, *visūci*, *vahnimāndya* (= *agnimāndya*), *mūtrakṛcchra*, *aśmarī*, *meha*, *somaroga*, *pidikāḥ*, *vidradhi*, *vṛddhi*, *gulma*, *śūla*,¹⁴⁰ *udara*, *pāṇḍu*, *śopha*, *visarpa*, *kuṣṭha*, *śvitra*,¹⁴¹ *nabhasvat* (= *vātavyādhī*), *vātāśra* (= *vātārakta*),¹⁴² *vandhyā* (infertility), *garbhiṇīruj*, *sūtikāroga*, *bālāroga*,¹⁴³ *unmāda*, *āpasmrī*, *netraroga*, *karnāroga*, *nāsāroga*, *āsyaroga* (= *mukharōga*), *śīroroga*, *vraṇa*, *bhaṅga*, *bhagandara*, *granthī* and related diseases,¹⁴⁴ *kṣudrarōga*, and *guhyaroga*.¹⁴⁵

Noteworthy features of the nosology of the *Rasaratnasamuccaya* are: a disease called *lohala* (15.78);¹⁴⁶ seven types of *vardhma* (18.11);¹⁴⁷ a list of the eight *mahārogas* at the beginning of chapter twenty-one: *vātavyādhī*, *aśmarī*, *kuṣṭha*, *meha*, *udara*, *bhagandara*, *arśas* and *grahāṇī* (21.1); descriptions of *śītavāta* (21.2), *spārśavāta* (21.12) and *raktavāta* (21.42); nine types of *vandhyā*: *ādivandhyā*, *raktajā*, *pittajā*, *kaphajā*, *saṃnipātajā*, *bhūtajā*, *devajā*, *abhicārajā* (22.1–2); a male, incapable of procreation, is called *vandhya* (22.3); women with four more types of disorders of fertility are called *garbhasrāvī*,¹⁴⁸ *mṛtavatsā*,¹⁴⁹ *striprasūti*,¹⁵⁰ and *kākavandhyā* (22.4);¹⁵¹ the list of nose diseases mentions six varieties of *pīnasa* (24.19);¹⁵² *kṣaya* *jaśīroroga* and *anantavāta* are absent from the list of diseases of the head (24.71); the treatment of baldness and premature greying of the hair are discussed after the section on diseases of the head (24.82–90); *khaṇḍakeśa* and *cācāroga* are used as synonyms of baldness (*indralupta*; 24.82 and 87); the list of *kṣudrarogas* consists of *vyāṅga*, *kacchapa*, *nīlikā*, *kunakha*, *viddha*,¹⁵³ *utkoṭha*, *koṭha*,¹⁵⁴ *alasa*, *kakṣā*, *ruddhaguda*, *prasupti*,¹⁵⁵ *vivṛtā*, *visphoṭa*, *valmīka*, *vispha*,¹⁵⁶ *kadara*, *ajagallī*, *jatumaṇi*, *andhālajī*, *rājīkā*, *kṣudrā*,¹⁵⁷ *lāñchana*, *śarkarā*, *yavaprakhyā*, *agnirohiṇī*, *jālāśmagadabha*,¹⁵⁸ *vidārī*, *masūrikā*, *padmaṇṭaka*, *gardabhī*, *śarkarārbuda*, *maṣa*, *ānandadūṣikāḥ*,¹⁵⁹ *gaṇḍāhvayā*,¹⁶⁰

panasikā, and irivellikā (25.1–2).

Some interesting technical terms are acalā (= manaḥśilā), kaṅkaṇā (= gandhaka) and vaiṣṇavisenā (= haritālā) (12.97).¹⁶¹

Some noteworthy names of plants and substances of vegetable origin are: ādhārī (17.47), agniparṇī (14.73),¹⁶² agniyugma (15.65),¹⁶³ ambhodhi (30.64),¹⁶⁴ ari (17.68),¹⁶⁵ bhūdāru (18.163),¹⁶⁶ candrāvātī (11.94),¹⁶⁷ ciratikta (16.68),¹⁶⁸ dhvaṃsī (10.94),¹⁶⁹ gajāṅkinī (16.78),¹⁷⁰ gañjā (15.76), harilatā (14.73),¹⁷¹ hiyāvalī (16.149; 17.113; 21.28),¹⁷² hiyāvalli (12.100),¹⁷³ jalamaṇḍapikā (18.216),¹⁷⁴ jayāyuga (19.35),¹⁷⁵ kādi (12.97),¹⁷⁶ kāmā (11.108 and 111),¹⁷⁷ kambukī (11.54),¹⁷⁸ kāpālī (10.94),¹⁷⁹ karālī (22.124),¹⁸⁰ karivijaya (17.69),¹⁸¹ khaṇḍī (22.72),¹⁸² kinī (15.76),¹⁸³ kurkuṭī (20.36),¹⁸⁴ mābāṇa (18.43),¹⁸⁵ mahābharī (18.19),¹⁸⁶ mahābherī (30.64),¹⁸⁷ mahiṣī (10.95),¹⁸⁸ meha (17.68),¹⁸⁹ nura (20.204),¹⁹⁰ peṭakārī (17.6),¹⁹¹ phalikā (17.17),¹⁹² raktaśākinī (16.147; 18.97),¹⁹³ rāmaśītalikā (13.10),¹⁹⁴ śākandha (18.131),¹⁹⁵ svarāṃśikā (20.198),¹⁹⁶ tīkṣṇaparnikā (16.93),¹⁹⁷ tittirīphala (12.58),¹⁹⁸ and uttamakaṇṭikā (10.86).¹⁹⁹

The author

The author does not mention his name, but refers to himself as the son of Siṃhagupta (1.8).²⁰⁰ The *Rasaratnasamuccaya* is generally attributed to an author called Vāgbhaṭa.²⁰¹ The question whether or not this Vāgbhaṭa is identical with the author(s) of the *Aṣṭāṅgaḥṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*, discussed by many scholars,²⁰² is no longer relevant, since it has been clearly established that the *Rasaratnasamuccaya* is much later than the two āyurvedic treatises.

The contents of the treatise indicate that the author was a Hindu, although some scholars claim that the maṅgala is of a Buddhist character.²⁰³

Date

Scholars defending the view that the son of Siṃhagupta who wrote the *Rasaratnasamuccaya* is the same as the Vagbhaṭa, son of Siṃhagupta, who is the reputed author of the *Aṣṭāṅgaḥṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*, tend to ascribe an early date to the work.²⁰⁴

Arguments disproving this identity and supporting a much later date were collected by P. Cordier,²⁰⁵ Gaṇanāthasena,²⁰⁶ P.V. Sharma,²⁰⁷ S. Ārya,²⁰⁸ and others.²⁰⁹

Decisive pieces of evidence are the borrowings from the *Rasārṇava*, *Rasaḥṛdaya*, *Rasendracūḍāmaṇi* and *Rasaratnākara*, and a formula attributed to Nityanātha (27.115–118).

The reference to somaroga (12.3) implies that the *Rasaratnasamuccaya* is later than Vaṅgasena's *Cikitsāsārasamgraha*. The quotations from the *Rasaratnākara* point to a period posterior to the first half of the fifteenth century.

A plant name found in the chapters on therapy indicates that the author of the *Rasaratnasamuccaya* probably belongs to the sixteenth century.²¹⁰ The quotations from the *Rasaratnasamuccaya* and *Rasavāgbhaṭa* in Mahādeva's commentary on

Bindu's *Rasapaddhati* prove that he is earlier than the first half of the seventeenth century. The earliest MS known dates from A.D. 1699.²¹¹

Commentaries

Commentaries in Sanskrit on the *Rasaratnasamuccaya* were written by Cintāmaṇiśārman Khare or Mahādeva Cimaṇājī Āpaṭe Khare, by the brothers Āśubodha and Nityabodha Senagupta, and by Hazārīlāl Sukul.

Cintāmaṇiśārman Khare's commentary,²¹² called *Saralārthaprakāśinī*, is an elaborate work, explaining the full text of the *Rasaratnasamuccaya*.

Works and authorities quoted or referred to are: *Aṣṭāṅghṛdaya* (2, 5), Bhairava (1, 119),²¹³ *Brhadyogatarāṅgiṇī* (16), Caraka (2), *Cikitsākalikā* (59), *Gītā* (46), Govinda (1), *granthāntara* (6, 49, 54, 55, 59, 72, 104, 106, 111, 116, 122, 123, 222), *Kāmaratna* (2), *Kuṇḍārka* (67),²¹⁴ *Madanavinodanighaṇṭa* (14), Manu (49), *Mārkaṇḍeyapurāṇa* (49), Nāgārjuna (39, 84), *Nāgārjunatantra* (2), *Nighaṇṭa* (39), Nityanātha (1, 2, 53, 65), Pūjyapāda (1, 2), *Purāṇa* (51), *Rājanighaṇṭa* (46), *Rasaḥṛdaya* (1, 12, 14, 21, 22, 23, 32, 70, 73, 74, 76, 84, 88, 89, 99, 104, 106, 122), *Rasaḥṛdayatīkā* (27, 86), *Rasarājasundara* (13, 97), *Rasaratnākara* (14, 15, 33, 38, 65, 73, 74, 85, 91, 108, 112, 115), *Rasārṇava* (4, 5, 19, 20, 21, 22, 28, 32, 35, 36, 37, 55, 70, 72, 73, 84, 88, 90, 91, 100, 105, 120, 124, 125, 126), *Rasasaṃketakalikā* (20, 63, 76), *Rasasāra* (1, 17, 18, 29, 30, 36, 41, 75, 78, 90, 94, 95, 96, 98, 99, 100, 102, 103, 121, 122, 123, 124, 125), *Rasāvatāra* (117), *Rasendrasārasaṅgraha* (6, 56), Rāvaṇa (2,²¹⁵ 8,²¹⁶ 32,²¹⁷ 40),²¹⁸ *Śivaśaktisaṃgamatantra* (22),²¹⁹ Somadeva (33), śruti (5, 8), Suśruta (2), Trimalla's *Taraṅgiṇī* (23, 50, 84), Trimallabhaṭṭa (59), *Uddiṣatantra* (2), Vāgbhaṭa (2), *Yogarātṇākara* (2), and (Trimallabhaṭṭa's) *Yogatarāṅgiṇī* (54, 84).

Plants mentioned in the *Rasaratnasamuccaya* are often described; their names in many regional languages are added.²²⁰

Variant readings are occasionally recorded.²²¹

Cintāmaṇiśārman Khare was a Cittapāvana brāhmaṇa of Kauśikagotra, the youngest son of Vāmana and Manūbāi; he was born in a village called Guhāgara, near Ratnāgiri in Koṅkaṇa (Mahārāṣṭra) in the year 1866 or 1867.²²²

The commentary by Āśubodha and Nityabodha Senagupta, called *Rasaratnasamuccayaabodhinī*,²²³ covers the whole of the *Rasaratnasamuccaya*. This elaborate commentary quotes from or refers to the following works and authorities: Amara, Amogha (28.59–83),²²⁴ *Amoghatantra* (5.136–140),²²⁵ Atri (1.56), *Atrisaphitā* (2.26;²²⁶ 9.41;²²⁷ 25.58–60),²²⁸ *Bhagavadgītā* (1.44), *Bhāgavata* (1.56; 5.5), *Bhaiṣajyaratnāvalī* (3.52; 24.111–114, 121, 122; 25.58–60 and 98; 27.20 and 115–118), *Bhāratānuśāsanika* (1.6),²²⁹ Bhāvamīśra (5.26, 45, 149; 24.29; 25.38), *Bhāvaprakāśa* (2.1, 37–42, 142; 3.35, 101, 123, 148; 4.27; 5.1 and 102–103; 9.6–8; 10.53–54, 59, 60; 24.12; 28.3; 29.19; 30.71), Bhoja (24.29, 106, 137; 28.59–83),²³⁰ *Brahmavaivarta* (11.1–3), Cakra (22.126, 141, 152, 153; 23.67; 24.85–86, 90, 122; 25.51–52 and 83–85; 28.59–83), *Cakradatta* (22.93–96; 24.93 and 136; 25.42; 28.37 and 41–45,

59–83; 30.31 and 61), *Cakrasaṃgraha* and *Cakrapāṇi*(saṃgraha) (10.80; 12.11; 17.11; 18.68; 22.108; 23.6; 24.13 and 138; 25.4, 45, 50, 73–74, 101–105; 28.59–83; 30.31, 32, 33, 60), Cakṣuṣya (24.71),²³¹ Caraka, *Deviśāstra* (18.181), *Dravyaguṇa* (30.71), *Gāruḍa* (4.28),²³² *Gītā* (1.44, 48, 51),²³³ *granthāntara*, *Hārīta* (27.1), *Kāśyapa* (25.106), *Līlāvātī* (10.4),²³⁴ *Mādhava* (24.105; 28.59–83),²³⁶ *Mādhavakara* (24.71 and 91),²³⁷ *Madhukośa* and *Madhukośakṛt* (20, 117–123 and 186; 24.71),²³⁸ *Manu* (1.47), *Manusaṃhitā* (5.4), *Mātrkābheda* (5.2), *Medinī* and *Medinīkośa* (10.4; 12.10; 22.116–120; 24.100–101), *Nāgārjuna* (28.59–83), *Nāradaśmṛti* (27.128–144), *Nighaṇṭurāja* (4.50), *Paribhāṣāpradīpa* (8.1; 10.75), *Pātañjala* (28.59–83), *Patañjali* (5.136–140), *Rājanighaṇṭu* (3.101; 4.1, 2–4, 50, 63–68; 5.2, 150, 194, 206; 6.39; 8.86; 10.71–73 and 82–83; 16.92–96 and 149–151; 18.78–92; 21.26–27; 24.106; 28.3; 30.34), *Rāmasena* (18.116–123), *Rasakaumudī* (16.129–138), *Rasaratnākara* (1.33; 2.4, 5–8; 5, 99, 100; 15.64, 65; 16.142–145; 17.2–4, 9–10, 11, 19–21, 43–44; 18.70–71, 96–100, 102–103, 116–123, 215–218; 19.14–18, 19–22, 32–34, 42–44, 45–53, 94–95, 99, 100–103, 107–111; 20.22, 41–46, 137–141, 142–146, 147–150, 225–226, 227–228; 21.3–7, 138–140, 152–153, 154, 157, 161, 162–164, 165–166; 22.114; 23.36; 24.10, 75, 92, 100–101, 109, 111–114, 122; 25.21, 51–52, 58–60; 27.14–16, 23–25, 31–38, 115–118; 28.8, 10, 12, 14, 15, 18, 27), *Rasendracintāmaṇi* (1.31–32, 33, 71, 83; 2.5–8, 69; 5.2, 100, 136–140, 150, 225–230; 6.27–57; 8.69, 70, 86, 88; 9.31–32; 10.53–54; 11.15–16; 12.18; 16.146; 18.116–123; 19.19–22, 90; 20.89–99, 142–146, 215–217; 21.20, 35–39, 162–164; 22.30–40, 41–46; 27.1, 4, 5; 30.7–9, 19–20, 92–95), *Rasendrasāra* (2.13; 8.29; 11.27–28 and 48; 14.2–13; 16.154–156; 17.8, 9–10, 19–21, 135–138, 139–140; 19.14–18; 21.9–11, 20, 35–39, 49, 60, 118–129, 162–164; 24.111–114; 27.20; 29.142–155 and 156),²³⁹ *Rasendrasārasaṃgraha* (1.33, 71, 83; 2.1, 5–8, 14–15, 21, 23, 65; 10.53–54; 12.18; 13.49–50; 14.36–50; 15.64; 16.90–91, 129–139; 17.28–29 and 135–138; 18.66–67, 70–71, 96–100, 102–103, 116–123, 215–218, 219–220; 19.14–18, 19–22, 32–34, 42–44, 90, 100–103; 20.1, 89–99, 151–153, 215–217, 225–226, 227–228; 21.35–39, 118–129, 162–164, 167–168), *Rasendrasāravākyā* (18.116–123), *Raseśvaradarśana* (1.76, 77, 78; 6.60), *Ratnamālā* (3.52), *Rudra* (10.4),²⁴⁰ *Rugviniścaya* (22.143–144; 25.1–2), *Rugviniścayakṛt* (23.28),²⁴¹ *Śaivasiddhānta* (17.1), *Sārakaumudī* (28.12), *Śārngadhara* (3.96; 4.20; 8.89; 27.26–30), *Śāsvata* (5.77),²⁴² *Siddhayoga* (20.35; 22.124; 23.74; 24.87, 94, 107; 25.68, 90, 101–105; 28.39–40, 41–45, 46–50; 29.80–81),²⁴³ *Śivādāsa* (12.11; 22.126; 24.85–86, 90, 122, 123; 25.42; 28.39–40, 59–83; 29.104–106),²⁴⁴ *Śivādāsavyākhyā* (24.87; 25.68),²⁴⁵ *Somadeva* (8.1), *Śrīkaṇṭha* (24.91),²⁴⁶ *Śruti*, *Suśruta*, *tantrāntara*, *Tattvacandrikā* (29.104–106),²⁴⁷ *Tattvacandrikākāra* (24.41; 28.46–50), *Ṭoḍarānanda* (3.96), *Trivikrama* (18.116–123), *Vācaspatya* (3.142),²⁴⁸ *Vāgbhaṭa*, *Vaṅgasena* (24.90), *Varāha* (18.205–214),²⁴⁹ *Varāhacārya* (26.22), *Vṛnda* (24.18, 35, 40, 41, 120),²⁵⁰ *Vyākhyākusumāvalīkāra* (28.46–50),²⁵¹ and *Yogaratanākara* (2.75–76; 23.45; 24.16–17, 118, 122, 123, 136; 25.37, 38, 39, 88, 93; 28.12 and 27).

The *Bodhinī* is an interesting and useful commentary; it gives much attention to the text of the *Rasaratnasamuccaya*; a large number of variants and parallels are discussed

by the authors, who were Bengali brāhmaṇas, sons of the well-known Jīvānanda Vidyāsāgara.

Hazārīlāl Sukul's *Dīpikā* on the *Rasaratnasamuccaya* quotes from or refers to the following works and authorities:²⁵² Amara (often), *Ānandāśramīya* (3, 64, 124, 137, 245, 297, 309, 375),²⁵³ Āśubodha (322),²⁵⁴ *Āyurvedaprakāśa* (53, 88, 91, 105, 133, 147, 168, 202, 269, 276), bhagavantaḥ (24), *Bhāratiyarasāyanasūstretihāsa* (370, 383),²⁵⁵ *Bhāṣānibandha* by Mallikḥita (285),²⁵⁶ *Bhāvacināmāṇi* (419),²⁵⁷ Bhāvamīśra (412), *Bhāvaprakāśa* (127, 412, 414, 437), Bindu (72, 80),²⁵⁸ *Brahmapurāṇa* (4), Caraka (45, 64), Caturbhujā (73),²⁵⁹ Cūḍāmaṇi (39, 42, 74, 95, 146, 151, 152, 158, 192, 195, 210, 227, 230, 239, 247, 370, 376, 410, 411, 412, 445),²⁶⁰ Dattarāma (369, 421, 424, 425),²⁶¹ *Devīśāstra* (483), Dharaṇīdhara (352, 446),²⁶² Dhunḍhuka(nātha) (12, 13, 15, 16, 70, 214),²⁶³ Gaṇeśa (290),²⁶⁴ Gayādāsa (413),²⁶⁵ *Gītā* (24, 25),²⁶⁶ Gorakṣa (167), Govinda (123, 449), Govindabhikṣu (361),²⁶⁷ Govindācārya (188), Govindapādāḥ (3, 15, 47, 70, 71, 97, 325),²⁶⁸ *granthāntara*, Hariprapanna (102),²⁶⁹ Haṭhapradīpikākāra,²⁷⁰ Jivārāma (31, 113, 293, 399, 421, 422, 424), *Jivārāmīya* (214, 428),²⁷¹ Jyeṣṭhamalla (322, 424, 425),²⁷² Kālidāsa (9),²⁷³ *Kālikātpāṭha* (96), *Kālikāṭīya* (31, 137, 140, 160, 178, 214, 269, 366, 386, 477),²⁷⁴ Kāśīya (449),²⁷⁵ Kośa (17, 294, 296, 309, 322, 468, 484), Kṛṣṇadeva (484),²⁷⁶ Kṛṣṇarāva (7),²⁷⁷ *Kumārasaṃbhava* (30),²⁷⁸ *Lauhapaddhati* (234), *Lohapaddhati*, (234, 235), Mādhava (13, 16, 45, 48, 49, 51, 63, 70, 74, 80, 81, 87, 121, 150, 207, 216, 239, 269, 452, 482), Mādhavācārya (188),²⁷⁹ Mahādeva (38, 74, 75, 80, 154, 158, 410),²⁸⁰ Medinī (315, 469, 484), *Mujarrabāt-e-Akbarī* (393),²⁸¹ Nāgārjuna (106, 159),²⁸² Nārāyaṇa (88, 135, 136, 137, 165, 174, 239, 266, 322, 357, 361, 412, 414, 439),²⁸³ *Nārāyaṇagrantha* (373), *Nighaṇṭu* (261, 283, 301, 426, 449, 469),²⁸⁴ Niraṇjana (19, 135, 323, 398, 422, 435),²⁸⁵ Nityanātha (3, 449), Padmanābhasūnu (85, 94, 188, 398),²⁸⁶ *Padmapurāṇa* (203), *Pāradasaṇhitā* (366, 370, 446),²⁸⁷ Pūnīya (31, 140, 160, 178, 181, 214, 363, 366, 375, 386, 422, 447, 477),²⁸⁸ *Punīyaṭippana* (111),²⁸⁹ *Purandararāhasya* (167), Raghunātha (113, 162, 165, 176, 267, 328, 365, 395, 444, 468, 484),²⁹⁰ Raghunāthavyākhyā (137), *Rasadarpana* (168), *Rasaḥṛdaya* (27, 28, 55, 57, 114, 137, 446),²⁹¹ *Rasakāmadhenu* (77, 105),²⁹² *Rasapaddhati* (76, 83, 101),²⁹³ *Rasaprakāśasudhākara* (105, 114, 116, 136, 140, 182, 188, 275, 276, 446),²⁹⁴ *Rasarājapaddhati* (446), *Rasarājaśaṅkara* (458), *Rasarājasundara* (106, 182, 188, 365, 425),²⁹⁵ *Rasaratnākara* (155, 214, 449), *Rasaratnapradīpikā* (123), *Rasārṇava* (64, 65, 67, 69, 81, 104, 200, 200 ka, 204, 230, 297, 340, 365, 426, 446), *Rasasāgara* (372), *Rasasāra* (437, 439),²⁹⁶ *Rasatarāṅginī* (144),²⁹⁷ *Rasāyanasāra* (76, 77, 266, 450),²⁹⁸ *Rasendra* (116, 120, 254), *Rasendracūḍāmaṇi* (263, 321, 356, 368, 375, 382, 426),²⁹⁹ *Rasendrakalpadruma* (446), *Rasendrasārasaṃgraha* (144, 436, 452), Praphulla Rāya (358),³⁰⁰ *Śābdārthacintāmaṇi* (259, 313),³⁰¹ Sadānanda (98, 172),³⁰² *Śaktyavatāra* (445), Śāligrāma (3, 284, 313, 420, 483),³⁰³ Somadeva (127, 129, 321, 356, 376, 395),³⁰⁴ Śyāma (206, 208, 224, 225, 252),³⁰⁵ Śyāmasundarācārya (450), *Ṭoḍarānanda* (393, 402, 457), Umeśa (54),³⁰⁶ Vāgbhaṭa, *Vaidyādarśa* (414), *Vaidyakaśābhasindhu* (299),³⁰⁷ *Vaijayantī* (309),³⁰⁸ *Vainkaṭeśvarīya* (181),³⁰⁹ *Vāmanapurāṇa* (64), *Veda* (64), *Vedānta*

(18), *Viṣṇudharmottara* (246), *Viśva* (94),³¹⁰ *Viśveśvarīprasāda* (449),³¹¹ *Vyāsa* (31, 63, 65), *Yādava* (64),³¹² and *Yaśodhara* (44, 50, 51, 59, 61, 85, 87, 89, 135, 137, 158, 197, 359, 375, 399, 412, 414).³¹³

The author of the *Dīpikā* refers to the views of modern scholars,³¹⁴ to those of scientists,³¹⁵ to the tradition adhered to by himself,³¹⁶ etc. The names of plants and substances in various parts of India are repeatedly mentioned.

Hazārīlāl's views are quoted in *Gulrājśarmamiśra's* commentary on the *Āyurveda-prakāśa*.

The author was a son of Rāmanātha Sukul, of Bharadvājagotra, and lived in a village called Mahuvā near Kānyakubja.³¹⁷ He also wrote a work called *Rasendra-sampradāya*. He was a teacher at the Patnā Āyurvedic College.³¹⁸

Chapter 10

Rasārṇava and Rasārṇavakalpa

The *Rasārṇava*

The *Rasārṇava* ¹ is one of the earliest and most important treatises on alchemy.

*Contents*²

The *Rasārṇava* consists of about 2,300 verses, arranged in eighteen chapters (paṭala). It is written in the form of a conversation between Śiva and Pārvatī. ³

Chapter one (tantrāvatāra; 60 verses) is about jīvanmukti, ⁴ obtained by means of mercury (4–31), the origin of mercury as Śiva's semen (33–36), ⁵ the good results of venerating the rasaliṅga, the bad effects of despising mercury, the praise of mercury and those who practise the art in the proper way, etc. (37–60).

Chapter two (dīkṣāvidhāna; 133 verses) begins with a description of the characteristics of a qualified guru (2–6), a pupil fit for initiation (7–14), and the female companion to be selected (15–35). ⁶ It proceeds with an account of the construction of the workshop (maṇḍapa) of the alchemist ⁷ and the elaborate rituals to be performed (dīkṣā) before beginning the alchemical operations (36–133).

Chapter three (mantranyāsa; 33 verses) continues the description of the preparatory rituals, accompanied by many mantras.

Chapter four (yantramūṣāgnivarṇana; 65 verses) opens with an enumeration of the utensils, apparatus and substances that should be present in the workshop (2–6). A number of yantras are dealt with: dolāyantra (7), jāraṇāyantra (8–14), mūṣāyantra or somānalayantra (15), garbhayantra (16–19), guptayantra (20–25), and haṃsapākayantra (28–29), ⁸ the various kinds of earth (30–35), and a series of mūṣās: vajramūṣā, varamūṣā, prakāśamūṣā, andhamūṣā, and bhasmamūṣā (36–43). ⁹ The functions of the rakta-, śukla- and biḍavarga are defined (44–46); substances for sealing a mūṣā (mūṣālepa) are described (47–48), followed by the colours of the flames which are specific for a particular substance (49–51), the characteristics of purified loha (52), definitions of pratīvāpa, niṣeka and snapana (53–54), and lohāvarta (55). The chapter ends with descriptions of koṣṭhakas, the vaṅkanāla, khalla, mardaka (56–60), and, finally, purificatory procedures (56–63).

Chapter five (oṣadhiniṛṇaya; 45 verses) lists the items of groups of vegetable and other substances employed in alchemical operations: niyāmaka plants (2–7), nirjīvakāraka plants (8–13), māraka plants (14–16), rasabandhakara plants (17–21), drāvaka plants (22–23), krāmaka plants (24–25), plants useful for rasāyana (526), the groups called mūlikā and pañcaratna (27–29), the substances called kṣāra (30), the

groups of substances called amlavarga, pañcalavaṇa, mahāviṣa, upaviṣa, tailavarga,¹⁰ mūtravarga, pittavarga, vasāvarga, viḍvarga,¹¹ raktavarga, pītavarga, śuklavarga, drāvaṇavarga,¹² and śodhanavarga (31–42).

Chapter six (abhrakādīlakṣaṇasaṃskāranirṇaya; 139 verses) deals with abhraka (mica), kānta(loha), vajra and vaikrānta. The subjects of the section on abhraka are: the origin of mica, its four colours (yellow, black, white, and red) and four varieties (pināka, dardura, nāga, vajra), the properties of the four varieties (2–9), the purification of mica (10–13), the extraction of its essence (14–16), and the liquefaction of the essence (druti; 17–39). The section on kānta begins with an enumeration of its five types, their characteristics, properties and uses (40–54); the five types are bhrāmaka, cumbaka, karsaka, drāvaka and romaka. The subjects that follow are the preparation of sūtaloha (55–57), and the purification and liquefaction of kānta (58–64). Section three, on diamonds (vajra), is concerned with their origin and types (brāhmaṇa, ksatriya, vaiśya, śūdra; male, female, napuṃsaka), the characteristics, properties and uses of these types (65–78), the purification of diamonds, their killing and liquefaction (79–122). Section four is about the origin of vaikrānta, its seven types (white, yellow, red, dark-blue, dove-coloured, coloured like a peacock's tail, emerald-green) and their uses (123–129), its purification, the extraction of its essence, and liquefaction (130–138).

Chapter seven (mahārasoparasalohalakṣaṇasaṃskāratadrāvaṇamāraṇanirṇaya; 154 verses) deals with the mahārasas, uparasas, metals (loha) and gems (ratna). The section on the mahārasas begins with their enumeration: mākṣika, vimāla, śāila, capala, rasaka, sasyaka, darada and sroto'ñjana (2); it proceeds with the origin, purification and extraction of the essences of mākṣika and vimāla, followed by their medicinal properties and uses (3–17); two varieties of mākṣika are distinguished (yellow and white) and three varieties of vimāla (white, yellow and red). The next subjects are śilājatu (= śāila), its origin, varieties (patita and apatita), names, and purification (18–22); the varieties of capala (yellowish, white, reddish, black) and their uses, the etymology of capala, its killing (23–27); rasaka, its three varieties (resembling mṛttikā, guḍa and pāṣāṇa),¹³ its purification, the extraction of its essence, its synonyms, the medicinal properties of rasaka and its essence (28–38); sasyaka, its origin, purification, the extraction of its essence, its medicinal properties (39–45); darada (cinnabar), its names and its three varieties (carmāra, śukatuṇḍaka, haṃsapāda),¹⁴ the extraction of mercury from it, its medicinal properties (46–52); sroto'ñjana, its purification and properties (53–54).

The section on the uparasas begins with the enumeration of the items of this group: gandhaka, tālaka, (manaḥ)śīlā, saurāṣṭrī, khaga (= kāsīsa), gairika, rājāvarta and kaṅkuṣṭha (56); it proceeds with the mythical origin of gandhaka (sulphur),¹⁵ its three varieties (coloured like the beak of a parakeet, yellow, white), and its purification (57–73); tālaka, its two varieties (paṭala and piṇḍa), its purification and the extraction of its essence (74–77); the purification and liquefaction of (manaḥ)śīlā (78); the purification of the two varieties of saurāṣṭrī (white and black) and the extraction of its essence (79–80); the purification of the three varieties (white, black, yellow) of kāsīsa (81–82);¹⁶ the purification of the three varieties of gairika (rakta-, hema-, kevalagairika) and the extraction of a white and a red essence (83–84); the purification of the two varieties of

rājāvarta (gulikā and cūrṇa) and the extraction of its essence (85–87); the description of kaikuṣṭha (88); a general method of purifying the mahārasas and uparasas (89–90); the preparation of a vajrapīṇḍī, useful in extracting the essence from the mahārasas and uparasas (91–95).

The section on the metals (loha) begins with their enumeration: gold, silver, copper, iron (tīkṣṇa), tin and lead (96–98). The subjects dealt with are: the three varieties of gold (rasaja, kṣetrāja, lohasaṅkarāja); the best type of gold is that of sixteen varṇa¹⁷ (99–101); the purification of gold (102); the two varieties of silver (white and black) and their purification (103–104); the purification of the two varieties (red and black) of copper (105–106), the three varieties (rohaṇa, bājara, capalālaya) of tīkṣṇa or kānta (107–109), the two varieties (white and black) of tin, and lead (110–115); the liquefaction of the metals (118–136).

The last part of the chapter is concerned with the liquefaction of gems (137–146), the killing of metals (147–149), and the praise of some important substances (150–153).

Chapter eight (bījasādhana; 88 verses) gives a detailed account of the power (rāgasamīkhyā) of diverse substances used in colouring mercury (2–15). The next subject is the preparation of bījas (16–23), divided into hema- and tārabīja,¹⁸ kalpita-, rañjita- and pakvabīja; a kalpitabīja is of two varieties, śuddha and miśra. The other subjects are the preparation of mixtures of two (dvandvamelāpana) or more (melana) substances (24–40), such as hemābhra, tārabhra, tīkṣṇābhra, vaṛigābhra, nāgābhra; the colouring (rañjana) of mercury by means of kalpita- and rañjitabījas (41–49), and pakvabījas (50–57); the preparation of hema- and tārabīja (58–72), rañjanabīja (75–79), rañjanataila (80–82), and sāraṇātāila (83–85).

Chapter nine (viḍakathana; 19 verses) describes viḍas,¹⁹ employed in the process called jāraṇa. Some of these viḍas bear names: vaḍavāmukha,²⁰ vahnimukha, jvālāmukha.

Chapter ten (rasaśodhana; 60 verses) deals with the names of mercury and its five varieties (12–9), and the names of eight saṁskāras and their effects: svedana, mardana, cāraṇa, jāraṇa, drāvaṇa, rañjana, sāraṇa and krāmaṇa (10–12). Five gatis of mercury are mentioned: mala-,²¹ haṁsa-,²² mala-, dhūma-²³ and jīvagati,²⁴ together with their characteristics (13–16).²⁵ Five avasthās of mercury are described: dhūma, cīcīcī, maṇḍīkapluti, akampa and vikampa; these are removed by means of niyamana (17–22).²⁶ The saṁskāras which were enumerated in some preceding verses are elucidated (23–28). Three doṣas of mercury are mentioned: viṣa, vahnī, mala (30–31). The system of weights (mānaparibhāṣā) is discussed (32–37). The remaining part of the chapter is devoted to a number of saṁskāras: svedana, mardana, pātana, nirodha, niyamana, and dīpana (38–59);²⁷ the seven kañcukas (42) or upādhijadoṣas are referred to (48).

Chapter eleven (bālajāraṇa; 221 verses) is mainly about cāraṇa and jāraṇa (1). Jāraṇa is of two types: bāla- and baddhajāraṇa (7). The order of a series of operations is elucidated (8–10). Jāraṇa of mica is said to be of two (patrābhrajāraṇa and sattvajāraṇa) or three (samukha, nirmukha, vāsānamukha) types (14–15).²⁸ These processes are described in detail (16–80ab). The state of mercury and its appearance are dependent on the amount of grāsa (abhraka, abhrakasattva, nāgābhra, etc.) added;

six states are distinguished: darḍadhārīn, jalaukāśama (resembling a leech), kākavi-ṣṭhāsama (resembling the droppings of a crow), dadhimaṇḍāsama (resembling whey), navaṇītasama (resembling butter) and golakākāra (resembling small balls) (50–54). The five avasthās are mentioned again (75).²⁹ The amount of mica digested (jīrṇa) by mercury determines whether the product is called bāla, yauvanastha or vṛddha (77–80ab).³⁰ If abhṛakasattva is not available, a grāsa consisting of kānta or tīkṣṇa may be employed as a substitute (80cd–81).

Subjects discussed after this section on the jāraṇa of abhṛaka(sattva) are the jāraṇa of gold (86–89), the types of jāraṇā known as bhūcarī and khecarī (90–107), and two more types of jāraṇā (108–124).

The next subject is the jāraṇa of gems (125–137). The verses which follow are about mercurial preparations ensuring vedha (138–163), the jāraṇa of liquefied sulphur and lead (164–175), the colouring of mercury (176), garbhadruti (177–179ab), the preparation of tāraṣṭa (179cd–180), the preparation of nāgābhra and its jāraṇa (180–191), krāmaṇa (197), seven forms of mercury: mūrchita,³¹ mṛta,³² jalūkābaddha, mūrtibaddha, paṭṭabaddha,³³ bhasman and khoṭa (198), and their description (199–208).

The order in which several operations are to be performed is mentioned: śodhana, grāsamāna, jāraṇa of sattvas, garbhadruti and bāhyadruti, jāraṇa of gold, puṭa of divine herbs, bandha of gems, rañjana, jāraṇā, anusāraṇā, krāmaṇa, and finally dāna (210–212).³⁴

The chapter ends with verses on the actions of processed mercury.

Chapter twelve (rasabandhana; 382 verses), the longest, deals with the bandhana of mercury, an art unknown to Brahmā, Viṣṇu and Indra (2). Mercury is said to be immediately solidified (baddha) in the vicinity of a rākṣasa called Prayoga, who lives in the region between Gaṅgā and Yamunā (3).

The first part of the chapter consists of a long series of kalpas, describing preparations of particular plants (divyauśadhi) and some other substances used in achieving alchemical aims, specifically rasabandha. The contents of this part of the chapter are closely related to the second part of the *Rasārṇavakalpa* of the *Rudrayāmala*.³⁵ A first series of kalpas deals with niśācara (4–26),³⁶ ajanāyikā (27–35),³⁷ narasāra (36–51), kaṅkālakhēcārī (52–57), mantrasīmḥāsani (58–64), surasīmḥāni (65–67),³⁸ and harīṇdarī (68–70). Some verses on the excellence of the sixty-four divyauśadhis or kulauśadhis for alchemical operations and the inferiority of the tṛṇauśadhis follow (71–83).

The second series of plants dealt with consists of divyauśadhis: kṣmāpālā³⁹ and gajāri (84–96), caṭulaparnī (97),⁴⁰ ekavīrā (98), raktakañcukī (99), vṛścikāpattrikā (100), vajrakanda (101–102), lāṅgalīkanda and karkoṭīkanda (103–104ab), śukacañcu or śukatunḍī and haṃsapādī or haṃsāṅghri (104cd–108), tṛṇajyotiṣ (109–111), uccaṭī (112–116),⁴¹ raktasnuhī (117–121), sthalapadminī (122–128), kumudīnī (129–131),⁴² the three varieties (white, red, deep blue) of citraka (132–140), nāginī (141–142),⁴³ jyotiṣmati (143–148), dagdhārohā (149–155), kaṭutumbī (156–165), kṣīrakanda (166–169), tīntīnī (170–171),⁴⁴ śākaṇṇaka (172–178), devadālī (179–182), and śvetaguñjā (183–188).⁴⁵

The second part of chapter twelve is devoted to other substances employed in the solidification (bandha) of mercury: candrodaka (189–211), viṣodaka (212–231), saṃjī-

vanījala (231–258), uṣṇodaka (259–276), and śailodaka (277–327);⁴⁶ it ends with rasāyanas, in particular pills (guṭikā), prepared by means of śailodaka (328–357), and bhaśmans (358–382).

Chapter thirteen (drutibandhana; 31 verses) is concerned with baddhajāraṇā, a process said to be superior to bālajāraṇā, described in chapter eleven.

Three types of bandha are distinguished: mūla- or vāsānābandha, rasabandhana, and pākabandha; mūlabandha, accomplished by means of the plants called mūlikā, is the best method (7–8). Three more types are: piṇḍikā-, druti- or kṣaṇa-, and saṃkocabandha (10–11). The larger part of the chapter gives an account of methods to achieve drutibandha.

Chapter fourteen (vajrabandha; 174 verses) describes many ways of achieving bandha by means of the bhasman of diamonds. Mercury, solidified (baddha) in this way, brings about krāmaṇa and vedha. The power of accomplishing vedha depends on the amount of mercury present in the mixture of substances. Ten varieties of the process called saṃkalī are described (7–18).

Pills (guṭikā), consisting of mercury solidified by means of vajrabhasman, are said to have wonderful properties, if used in the prescribed way, accompanied by the appropriate mantras (19–36, 37–48, 49–56).

Chapter fifteen (piṣṭistambhamahārasoparasavajrabandha; 207 verses) begins with the bandha of mercury by means of several varieties of vaikrānta (2–47), by means of kānta (48–50), capala (51–62), gandhaka and gandhapīṣṭikā⁴⁷ (63–106), and tālaka (107–111). It goes on with several ways of making a khoṭa (= baddhasūta, solidified mercury), also called the stambhana of a rasapiṣṭikā (112–163). Five types of bandha are said to produce a nigala or gola: khoṭa-, poṭa-, bhasma-, dhūli- and kalkabandha (164). Several methods of making a nigala are described (165–185), followed by procedures aiming at piṣṭikāstambhana (186–205).

Chapter sixteen (rasarañjana; 110 verses) describes the liquefaction (drāvaṇa, druti) of solidified (baddha) mercury, followed by its digestion (jāraṇā) of diamonds and other precious and semi-precious stones. These and other similar processes result in the colouring of metals, making them resemble gold, and in the acquisition of a divine body.

Some bandhas are also dealt with (95–98: cūrṇabandha; 99–107).

Chapter seventeen (lohavedha; 166 verses) is concerned with the saṃskāras called sārāṇa and krāmaṇa, which result in vedha, the transmutation of base metals into silver and gold. The three stages of sārāṇa, called sārāṇa, pratisārāṇa and anusārāṇa, are described (2–5). Some methods of reducing the hardness of metals (mṛḍukaraṇa) are dealt with (106–114), as well as procedures enhancing the colour of the artificial gold (varṇotkarṣaṇa) and purifying it (118–151).

Chapter eighteen (dehavedha; 230 verses) describes the acquisition of a divine, immortal body, not subject to disease and decrepitude.⁴⁸

The chapter begins with the purification of one's body (kṣetrīkaraṇa; 2–22), preliminary to the consumption of the mercurial preparation called āroṭa (12). The bhasman of mercury that has digested diamonds is the best preparation one can take; the bhasman of mercury that has digested gold, silver, copper, tīkṣṇa, capala, bājara, rohaṇa, or a

common type of tikṣṇa make one attain the position of Rudra, Viṣṇu, Brahmā, Kubera, Sūrya, Soma, Agni, or Indra respectively (23–25). The urine and faeces of the successful alchemist (sādhaka) turn soil and stones into gold and his drops of sweat convert the eight metals into gold (28–29).⁴⁹ The miraculous effects of the mercurial preparations taken by the practitioner are elaborately described. These effects depend on the type of preparation and its dosage (40–46 and 56–60). The attempts will be abortive, however, if the appropriate mantras are neglected which protect the adept against the attacks of all sorts of malevolent beings (100–106). The eight articles of food called kakāra should be avoided: kūṣmāṇḍa, karkaṭī, kāliṅga, kāravellaka, kusumbhaka, karkoṭa, kadālī and kākamācīkā (120). Many more articles of food are prohibited (124–126) and numerous rules of behaviour are to be observed (121–123, 127–136, 144–146).

The disorders brought about by improper use (rasājīrṇa) and their treatment are discussed (137–143).

Eight kinds of vedha of the body are distinguished: tvag-, māṃsa-, rakta-, asthi-, majja-, nāḍī-, dhātu- and kavacavedha; each kind also leads to a particular type of transmutation of a metal (147–153ab).

Several marvellous pills (guṭikā) are described: vajrāṅgasundarī (174–177), sarvasiddhidā (179–181), some pills without a name, and a gola (195–199).

Sources are not cited by name. Once (7.18) a *granthāntara* is mentioned, which may be the *Carakasaṃhitā* or one of the other āyurvedic classics.⁵⁰ The *Ḍāmaratantra* appears to be referred to in some MSS.⁵¹

The *Rasārṇava* is quoted or referred to in the *Amṛtasāgara*,⁵² the *pariśiṣṭas* of the *Anandakanda*, the commentary on the *Aṣṭamahāmātrā*, the *Āyurvedaprakāśa*, *Āyurvedasaṃkhyā*,⁵³ *Āyurvedīya Khanijavijñāna*, *Basavarājīya*,⁵⁴ *Brhadrasarājasundara*, *Brhadyogatarāṅgiṇī*,⁵⁵ *Capalanirṇaya* of the *Rasatarāṅgiṇī*,⁵⁶ a *Cikitsāsārasaṃgraha*,⁵⁷ Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*,⁵⁸ Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Khare's commentary on the *Rasaratnasamuccaya*, Mādhava's *Āyurvedaprakāśa*, Nārāyaṇabhūpati's *Nārāyaṇavilāsa*,⁵⁹ the *Pākāvalī*,⁶⁰ *Pāradasaṃhitā*, *Rasadhātuprakāśa*, *Rasakakṣāpuṭa*, *Rasakāmadhenu*, *Rasāmṛta*,⁶¹ *Rasaprakāśasudhākara*, *Rasarājyalakṣṇī*, *Rasaratnasamuccaya*, *Rasasaṃgrahasiddhānta*, *Rasasindhu*, the commentary on the *Rasatarāṅgiṇī*,⁶² the *Rasatattvavivecana*, *Rasayogasāgara*, *Rasendracintāmaṇi*,⁶³ *Rasendrakalpadruma*, *Rasendrapurāṇa*,⁶⁴ *Ranākaraśaḍhayogagrantha*, *Sarvadarśanaśaṃgraha*,⁶⁵ Somadevaśarma's commentary on the *Āyurvedaprakāśa*, Mallāri's *Vaidyakalpataru*, the *Vaidyakaśāroddhāra*, *Vaidyaśāstrapravartakācāryānāmasamuccaya*, *Revaṇa's Vīrabhaṭṭīya*, the *Yogaratanākara*,⁶⁶ and the *Yogatarāṅgiṇī*.⁶⁷

Anonymous quotations from the *Rasārṇava* are found in the *Rasajalanidhi*, Mahādeva's commentary on the *Rasapaddhati*,⁶⁸ the *Rasaratnasamuccaya*, and *Ṭoḍara's Āyurvedasaṃkhyā*.

A number of passages from the *Rasārṇava* are nearly identical to passages from the *Rasahr̥daya*.⁶⁹ The *Rasendramarigala* borrows widely from the *Rasārṇava*.⁷⁰ Borrowings from the *Rasārṇava* or from a common source are also found in the *Kākacāṇḍī-śvarakalpatantra* and *Kākacāṇḍīśvarimata*.⁷¹

The *Rasārṇava* was one of the sources of the *Āyurvedaprakāśa*, *Kūpīpakvara-*

sanirmāṇavijñāna and *Rasendrasambhava*.

The *Rasārṇava* is mentioned in Māṇikyadeva's *Rasaratnasamuccaya*.

Special features

Alchemy and the philosophy on which it is based are declared to be superior to the six philosophical systems (*ṣaḍdarśana*), because of the importance of the conservation of the human body (*piṇḍadhāraṇa*) for those aiming at emancipation while still alive (*jīvanmukti*; 1.7–17). Alchemy is regarded as belonging to *karmayoga*, a way of life governed by the cultivation of either *rasa* (mercury) or *vāyu* (breath);⁷² both ways are described as parallel methods (1.18–22). The practitioner of the alchemical art should also be experienced in *Hatthayoga* (1.26).⁷³

Four varieties of the *rasaliṅga*, to be worshipped by the alchemist, are distinguished, in increasing order of merit: made from mercury mixed with mica, mixed with a *viḍa*, prepared by help of mantras, and mixed with *rasaka* (1.44).

Members of all four *varṇas* may be accepted as pupils by a teacher (2.12). The female companions to be selected are, according to the characteristics they possess, called *kākinī*, *kīkaṇī* and *kāñcīkācinī* (2.19).

The construction of the alchemist's workshop (*maṇḍapa*) with its *rasaliṅga*, a process accompanied by rituals, is described in detail (2.38–103).⁷⁴ Many divinities should be worshipped, amongst whom are Nandin, Mahākāla, Bhṛṅgirīṭa, Mahābala, Kumbhakaṛṇa, Sugrīva, Bhṛṅgīka, Dṛḍhāyudha, the ten alchemical *Dūtis*:⁷⁵ Lepikā, Kṣepikā, Kṣārikā, Rañjikā, Lohaṭī, Bandhakārī, Bhūcarī, Mṛtyunāśinī,⁷⁶ Vibhūti, and Khecari⁷⁷ (2.54 and 57–58), the four Śaktis: Mālinī, Hemaśakti, Balā, and Vajraśakti (2.62), and the six divinities consisting of Mahākāla, Mahābala, Aghora, Vajravīraka, Krodha, and Kaṅkāla (2.96–97).

Chapter three also refers to many divinities and other authorities, amongst whom are the four Siddhas, the eighteen excellent men,⁷⁸ *Caṇḍaghaṇṭā*, Bhairavī, and *Caṇḍakāpālīnī* (3.10–15). A number of mantras are referred to by name: *ḍāmaramantra*, *cintāmaṇimahāvīdyā*, *caṇḍikāmahāmantra*, *aghorāstra*, *mahāpāśupatāstra* (3.23–28), *rasāṅkuśamantra*, and *kubjikāmantra* (3.29–32).

The *Rasārṇava* distinguishes five *mahāviṣas* (major poisons): *saktuka*, *kālakūṭa*, *sitamustā*, *śṛṅgī* and *kṛṣṇaviṣa* (5.33), and five *upaviṣas* (minor poisons): *snuhī*, *arka*, *unmattaka*, *karavīra* and *lāṅgalī* (5.34ab).⁷⁹

The *Rasārṇava* adds *karṣaka* to the usual four varieties of *kāntaloḥa*; it is regarded as the second best, next to *drāvaka*, the very best; both varieties are said to be suitable to alchemical and *rasāyana* purposes (6.40, 44, 48). Seven varieties of *vaikrānta* are described (6.127); the *karbura* type is not mentioned.

The list of *mahārasas* (7.2) is unusual in including *darada* (cinnabar) and *sroto'ñjana*, whereas *abhraka* (mica) and *vaikrānta* are omitted.⁸⁰ The *Rasārṇava* is the only *rasaśāstra* text listing *sroto'ñjana* as a *mahārasa* and excluding *vaikrānta* from the group.⁸¹

Two varieties of *mākṣika*⁸² are mentioned, yellow and white in colour (7.5). Their usual names, *suvarṇa*- and *raupyamākṣika*, are absent from the *Rasārṇava*, where they are called *tāpya* and *āvartaka* (7.14). Three varieties of *vimala* are distinguished: *yel-*

low, white and red (7.5); their usual names, hema-, tāra- and kāṇṇṣyavimala, are absent. The two varieties of śilājatu, patita and apatita (7.18), not known from other texts, may correspond to those usually called gomūtra- and karpūraśilājatu.⁸³ The four varieties of capala, white, yellow, red and black (7.23), are also mentioned in the *Rasapaddhati*, *Rasaratnākara* and *Rasendrapurāṇa*; the *Rasārṇava* and *Rasapaddhati* agree in regarding the white and yellow varieties as useful for alchemical purposes. The three varieties of rasaka, resembling mṛttikā, guḍa and pāṣāṇa (7.28–29), are peculiar to the *Rasārṇava*; its sattva, which may be zinc, is said to resemble tin (kuṭila; 7.35). The verses on sroto'ñjana (7.53–54) do not refer to the other varieties of añjana, described in many rasaśāstra texts.

The uparasa list of the *Rasārṇava* (7.56) is remarkable by its inclusion of rājāvarta, in common with the *Rasaratnākara* (III.1.57) and one of the lists found in the *Rasaśāstra* (6.8–9a). The three varieties of sulphur (gandhaka) (7.67) are also found in the *Rasapaddhati* (55), whereas many treatises add a fourth variety, black in colour. The two types of tālaka are called paṭala and piṇḍa (7.74); the paṭala type corresponds to the one called pattra, patrin or dala in other texts. Varieties of manaḥśilā are not mentioned (7.78). A white and black variety of saurāṣṭrī are distinguished (7.79), a white, black and yellow one of kāsīsa (7.81). Three differently coloured varieties of gairika are mentioned (7.83), whereas most texts describe two varieties. The two types of rājāvarta (gulikā and cūrṇa; 7.85–87) may be peculiar to the *Rasārṇava*. Kaikuṣṭha is very briefly characterized as having the colour of coral and possessing a sattva (7.88).

The metals are called loha; the term dhātu is not used in the *Rasārṇava*. The series of metals is noteworthy by its mention of tīkṣṇa, which is usually one of the three types of iron, the other two being kānta and muṇḍa. Kānta is dealt with separately (6.40–64), while muṇḍa is not described in the *Rasārṇava*. Gold and silver are sārālohas, tīkṣṇa and copper sādharmaṇālohas, tin and lead pūṭikalohas (7.96–98).

Gold is said to be of three varieties only and to be either red or yellow (7.99–100); its sixteen varṇas are not, as in other texts, restricted to divine types of gold (7.101). Silver is either white or black (7.103). Copper is red or black (7.105); the two varieties called nepāla and kṣuraka are not mentioned. Three varieties of tīkṣṇa are enumerated (rohaṇa, vājara, capalālaya; 7.107), whereas many texts have more varieties; the verse listing these varieties adds that kāntaloha is a synonym of tīkṣṇa, which disagrees with the description of kānta in chapter six. Tin is described as white or black (7.110), while most treatises distinguish a kṣura and miśra type.

Chapter eleven tells a story about Ruru.⁸⁴ one of the Dānavas,⁸⁵ who took a small amount of mercurial bhasman, which enabled him to root up the world and destroy Kailāsa; Śiva conquered this malevolent being after taking a particular, very potent, mercurial preparation (11.158–161).

Four differently coloured varieties of mercurial bhasman are mentioned: black, white, yellow and blue (11.205).⁸⁶

Some of the divyauśadhis mentioned in chapter twelve are described: caṭalaparṇī (12.97), tṛṇajyotis (12.109), uccaṭī (12.112–114), sthalapadmiṇī (12.123–124), jyoti-smatī (12.144), dagdhārohā (12.149–151), and kṣīrakanda (12.166–168).

Chapter twelve also deals with the mythical origin and properties of a wonderful

substance called kartarāśa (12.202–210).

The saṃjīvanījāla, which made the dead Daityas return to life, is said to be found near a village called Ambikā,⁸⁷ situated not far from the mountain Kṛṣṇagiri,⁸⁸ to the south of Kadalīnagara, a city located on the right bank of the Godāvarī (12.236–239).

Uṣṇodaka is found in the Uṣṇodakakuṇḍa, near a temple dedicated to Kampesvara, lying on the river Prañītā,⁸⁹ in the vicinity of the city called Kampa, located in its turn to the north of Mātāpura, a temple on the mountain Sahyādri, north of the Godāvarī (12.260–262).

Geographical names occurring in the verses on śailodaka are: Adhāreśa, Bhadrāṅga, Bhagavatī,⁹⁰ Brahmagiri,⁹¹ Brahmesvara, Dhāreśvara, Durjadesa, Gokarṇa,⁹² Gokulanagara,⁹³ Kiṣkindhyā,⁹⁴ Kṣīrakṣetra, Mālyavant,⁹⁵ Pampā,⁹⁶ Paryāṅka, Sahya,⁹⁷ Simhadvīpa, Śrīśaila,⁹⁸ Śrīvāna, Tristhala, Varṣāpurī, Vindhya, and Vyāghrapurī⁹⁹ (12.282–287).

Chapter fourteen refers to a number of twenty-four Siddhas (14.40).

Chapter seventeen, devoted to vedha, does not regard this process as a separate saṃskāra.¹⁰⁰

Several groups of drugs are listed in chapter five.

The niyāmaka drugs are: ākḥuparīṇī,¹⁰¹ āmalakī, anantā, balā, bhṛṅgarāja, brahmaḍaṇḍī,¹⁰² cakramarda, dviparṇī, ekaparnikā,¹⁰³ ghanadhvani,¹⁰⁴ girikarṇikā, gojihvā, jalabinduḥ,¹⁰⁵ jvālīnī,¹⁰⁶ kākajaṅghā, kākamācī, kañcukī, kapotikā, kokilākṣa, kṛṣṇā, kṛṣṇaparnī,¹⁰⁷ kṣīrīṇī, kukkuṭī,¹⁰⁸ kuruṅgiṇī,¹⁰⁹ mahābalā, maṇḍūkarnī, matsyākṣī, meṣaśṛṅgī, nāgabalā, nīlī, padmacāriṇī, pāṭhā, phaṇījihvā,¹¹⁰ punarnavā, rāśnā, saharā, sahadēvī, śarapunkhā, sarpākṣī, śatāvarī, śikhaṇḍīnī,¹¹¹ śvetā,¹¹² tittīḍī, triparṇī,¹¹³ tulasī, vahnīkarkoṭī,¹¹⁴ and viṣṇukrāntā (5.2–7).

The rasanirjīvakārikā drugs¹¹⁵ are: agnidhamanī, ajamārī, aṅganāmikā, bāla-mocakā,¹¹⁶ brahmacāriṇī,¹¹⁷ brhātī, cakrī,¹¹⁸ caṇḍālī,¹¹⁹ ekavīrā,¹²⁰ gajakarṇikā,¹²¹ gajārī,¹²² haṃsārighrī, hanūmatī,¹²³ hemapuṣpī, himāvatī, kākamācī, kākamuṇḍī,¹²⁴ kālikā, kāñcanī,¹²⁵ kañcukī, keśinī,¹²⁶ khaḍgārī,¹²⁷ koṭarākṣī,¹²⁸ kuhukarṇikā,¹²⁹ kumārī, lakṣmī,¹³⁰ lāṅgalī, mānīkandā,¹³¹ meṣaśṛṅgikā, modā,¹³² narajīvā,¹³³ narakasā,¹³⁴ nīlacitraka, rājikā, rākṣasī, raktacitraka, raktasnuhī, raktaśṛṅgī,¹³⁵ raktikā, rudantī, śākhoṭaka, śamī, śaṅkhaṇḍī, somalatā, śṛgālajihvā, sūryabhaktā, tāmbūlī, toyavallī,¹³⁶ uccaṭā, vajrī, vanarājī,¹³⁷ vyāghranakhī, and vyāghrī (5.8–13).¹³⁸

The drugs that are helpful in the killing (māraṇa) of mercury are: bākucī, bilva, brahmatīja, dantīnī, devadālī, gojihvā, gosandhī, indravāruṇī, kākajaṅghā, kañcukī, kāravallikā, karkoṭī, kārpāsa, kaṭutumbī, kṛṣṇajīraka, kṛṣṇakanaka,¹³⁹ mahākālī,¹⁴⁰ paṭolī, pipṭluka, śambarī,¹⁴¹ sitāṅkola, śvetaguṇjā, śvetārka, and yavacīcā (5.14–16).

Drugs used in the bandha of mercury are: arkapatrī, brahmaḍaṇḍī, cakrāṅkī, cakrikā, dagdharuhā, devadālī, hanūmatī, hemavallārī, indurī,¹⁴² īśvarī, kākamācī, kṛṣṇamārjārī, kṣīrakukkuṭī, modinī,¹⁴³ nāgajihvā,¹⁴⁴ nāgakarṇī,¹⁴⁵ nīlajyotiḥ, raktacitraka, raktasnuhī, śākhoṭakī, śaṅkhaṇḍī, somalatā, rudantī, sthālapadminī, tāmrarnī,¹⁴⁶ tridaṇḍī, triśūlī, trīṇajyotiḥ, utkaṭā, varṣāpatrī, vartulaparnīkā, vīrā, and vṛddhadāruka (5.17–21).

The drāvīkā group¹⁴⁷ consists of devadālī, kadālī, kākamācī, koṣṭakī, śigruka, sūryāvarta, udakakaṇā,¹⁴⁸ vajrakanda, and vandhyā (5.22–23).

The *krāmikā* drugs¹⁴⁹ consist of *arjunī*, *arkapatṭrikā*, *brahmī*, *cavī*, *ghanarava*, *haṃsapādī*, *kākamācī*, *kāravella*, *kāsamarda*, *kṛtāñjali*, *kṣīranālī*, *kuravakā*, *lakṣmaṇā*, *nāginī*, *śatāvarī*, *saṭīrī*, *tāmbūlī*, *varāhakarṇī*,¹⁵⁰ and *vyāghrī* (5.24–25).¹⁵¹

Brahmaṇḍa,¹⁵² *sudaṇḍa*¹⁵³ and *lohadaṇḍa* are useful for *rasāyana* purposes, because they are of the nature of *Brahmā*, *Viṣṇu* and *Maheśvara* (5.26). *Bhṛīgarāj*, *bhūpāṭalī*, *hemaparṇī*, *kaumārī*,¹⁵⁴ *nāgavallī*, *paṭolī*, *siṃhavallī*, and *śūkarī* are the eight plants called *mūlikā* (5.27). The *pañcaratna* group, employed in the purification of mercury and in *jāraṇa*, consists of *indirā*, *kaṅkālakhacarī*, *kṣamāpālī*, *mantrasiddhāsanā*, and *niśācarī* (5.28).

Noteworthy names of plants, apart from those already mentioned, are: *ahimāra* (8.77; 14.141),¹⁵⁵ *amṛtākanda* (6.98), *āraktavallī* (8.43; 15.2), *bhiṇḍī* (6.12), *bhiṇḍī* (6.102),¹⁵⁶ *bhūmyāmalaka* (15.9), *bījā* (6.98),¹⁵⁷ *brahmasomā* (17.10),¹⁵⁸ *bṛhatītraya* (6.35), *cakrāṅkā* (15.138; 16.17), *challī* (14.98), *dvipadī* (12.8, 37, 39; 14.38; 15.2, 72, 75, 187, 190; 16.96; 17.9),¹⁵⁹ *dvyādraka* (7.21), *gadā* (11.24),¹⁶⁰ *gaurīphala* (7.113), *gokarṇā* (10.50),¹⁶¹ *gopālakī* (7.109),¹⁶² *gorambhā* (15.136), *grḍhrakarṇī* (17.10), *hīlāmucā* (11.25), *kākāṇḍī* (6.39; 15.148),¹⁶³ *kākeṣṭha* (18.6), *kākinī* (6.24),¹⁶⁴ *kāma* (8.83),¹⁶⁵ *kandapadminī* (14.168), *kaṇḍūlasūraṇa* (6.105),¹⁶⁶ *kāntā* (10.39),¹⁶⁷ *kapālī* (6.26),¹⁶⁸ *karaka* (15.182),¹⁶⁹ *karṇākhya* (8.36),¹⁷⁰ *kauberī* (11.25), *kīlāla* (6.81),¹⁷¹ *kī-tamārī* (12.42),¹⁷² *kokilā* (15.148, 175, 182),¹⁷³ *kuliśa* (6.30),¹⁷⁴ *kumudī* (15.2),¹⁷⁵ *māghakhecari* (12.53), *mahāsomā* (15.138), *mārjārapādī* (6.27),¹⁷⁶ *mārjārī* (16.10),¹⁷⁷ *nāgākanyā* (8.77),¹⁷⁸ *nāgaśuṇḍī* (11.44),¹⁷⁹ *nārī* (7.139; 13.17),¹⁸⁰ *peṭārī* (6.91, 99), *rāginī* (11.86),¹⁸¹ *rasāṅkuśa* (10.52), *rasaphala* (12.364), *śakraiatā* (16.89),¹⁸² *śalyā* (15.45), *śaṃkara* (15.198), *śivā* (9.16; 16.89),¹⁸³ *sthalakumbhī* (6.118), *śūkakanda* (12.106), *sumukha* (6.13), *suvarṇā* (17.74),¹⁸⁴ *tamā* (15.153),¹⁸⁵ *tiktaśāka* (11.26),¹⁸⁶ *timira* (6.98; 14.150),¹⁸⁷ *varṇikādvaya* (11.178),¹⁸⁸ *vasuhatṭa* (11.86; 15.9),¹⁸⁹ *vegā* (6.30),¹⁹⁰ *viṣatṛṇa* (12.229, 230), *viśvāmitrakapāla* (14.118),¹⁹¹ and *vyāghrakanda* (6.130).

Some interesting *yantras* referred to are: *bhramarāyantra* (15.46), *cakrayantra* (15.107), *dīpayantra* (14.129), *krauñcapāda* (12.107), *medinīyantra* (12.60), and *padmayantra* (11.194).

Beef (*gomāṃsa*) is an item required in a number of alchemical operations (6.32; 7.4 and 78).

Kapālī(n) and *Kāpālīka* are rather often employed terms,¹⁹² which may refer to the alchemist *Kāpālīka* or the sect of the *Kāpālīkas*.

The author

The author of the *Rasārṇava* is unknown. The work is sometimes ascribed to Śāmbhu¹⁹³ or Bhairavānandayogin.¹⁹⁴ It is possible that later texts refer to the author as *Manthānabhairava*.¹⁹⁵

Date

The period of composition of the *Rasārṇava* cannot be established with any certainty, but the work is earlier than the middle of the fourteenth century, because it is quoted in the *Sarvadarśanasamgraha*. Most scholars place it, in imitation of P.C. Rāy,¹⁹⁶ in the twelfth century.¹⁹⁷ P.C. Rāy¹⁹⁸ claimed that the *Rasārṇava* borrowed copiously from

Nāgārjuna's *Rasaratnākara*, i.e., the *Rasendramaṅgala*; G.P. Srivastava¹⁹⁹ asserted that it borrowed from the *Rasaḥḍaya*. D.G. White²⁰⁰ noticed that the early eleventh-century *Vimalaprabhā* commentary on the *Kālacakratānta* reveals a number of striking similarities in both language and subject matter with the material found in the *Rasārṇava*.

P. Ray²⁰¹ regards the *Devīśāstra*, mentioned in a number of treatises, as identical with the *Rasārṇava*.

The *Rasārṇavakalpa*

The *Rasārṇavakalpa*²⁰² is a treatise on alchemy that forms part of the *Rudrayāmala* *tantra*.²⁰³ The work, in the form of a dialogue between Bhairava and Pārvatī, is written in verse, with the exception of two passages in prose (368–370; 651), and consists of 814 stanzas. A division into chapters is absent, but the text can broadly be divided into three parts: (1) 1–77: rasāyana preparations; (2) 78–207: alchemical operations; (3) 213–814: kalpas.²⁰⁴

*Contents*²⁰⁵

Part one describes several rasāyana preparations, all of them containing mercury or one of its compounds.

Part two describes several methods of making artificial gold;²⁰⁶ a number of saṃskāras of mercury are referred to; the medicinal qualities of some preparations are mentioned; some substances are used for rasāyana purposes, to obtain dehasiddhi, or to revive the dead. Part two is also concerned with the alchemical uses of a number of plants; the groups of verses on these plants resemble kalpas; some of the plants are described: vartulapaṇī (152), jyotiṣmatī (173), and dagdhārohā (177–180); the sixty-four divyaśadhis are referred to (135); kulauśadhis and ṛṇauśadhis are distinguished; the ṛṇauśadhis are, in contrast with the kulauśadhis, useless for alchemical purposes (133cd–137).

Part three consists of thirty-one kalpas, describing the origin of particular substances, their names, characteristics, properties and uses.²⁰⁷ Twenty-two kalpas are concerned with plants, three with inorganic substances (various substances, gandhaka, tālaka), and six with types of soil and water.²⁰⁸

The kalpas are devoted to: aparājītā (213–229),²⁰⁹ brahmaṇḍī (230–241),²¹⁰ aśvagandhā (242–250),²¹¹ muṣalī (251–256),²¹² a number of inorganic substances (257–260: śrīkhalākālpā), jyotiṣmatī (261–301),²¹³ śvetārka (302–322),²¹⁴ gandhaka (323–376),²¹⁵ tālaka (377–406), raktavajrī (407–414), uccaṭā (415–437),²¹⁶ kuṣmāṇḍī (438–448), īśvarī (449–491),²¹⁷ ṛṇajyotiṣ (492–500),²¹⁸ vīrā (501–516), devadālī (517–545),²¹⁹ pītadevadālī (546–564), kaṭutumbī (565–578),²²⁰ kṣīrakañcukī (579–590),²²¹ rudravantī (591–603),²²² somarājī (604–611),²²³ dakṣiṇadeśatāmravarṇa- (mr̥ttikā) (612–617), mayūragira(rasa) (618–650), nāgamaṇḍala(rasa, -kardama, etc.) (651–701),²²⁴ candrodaka (702–729),²²⁵ viṣodaka (730–745),²²⁶ śailodaka (746–756),²²⁷ kolakavṛkṣa (757–764), śālmālī (765–782),²²⁸ śrīvṛkṣa (738–789), and eraṇḍa (790–814).²²⁹

Sources are not referred to. An ancient authority mentioned is Nārada (215).²³⁰

Part two of the *Rasārṇavakalpa* is closely related to *Rasārṇava* 12.8–182. The candrodaka-, viṣodaka- and śailodakakalpas also find counterparts in the *Rasārṇava*.²³¹ Noteworthy agreements exist between verses of part three of the *Rasārṇavakalpa* and verses of the *Kākaṇṭhīśvarakalpatantra*.²³²

Special features

Interesting plant names found in parts one and two are:²³³ ajanāyikā (97),²³⁴ anāmikā (66), arkanamitā (66),²³⁵ arkavallī (61),²³⁶ bahulā (64),²³⁷ bhṛṅga (57),²³⁸ dagdhārohā (177–181),²³⁹ dvipadī (105; 106),²⁴⁰ ekavīrā (153), gajadhvajī (66),²⁴¹ gajāri (148),²⁴² haṃsagamanī (66),²⁴³ haṃsāṅghri (162),²⁴⁴ harīndarī (130),²⁴⁵ jaṭādhara (67),²⁴⁶ kaṅkālākhecari (115–116; 118), khecari (122; 123),²⁴⁷ koravallī (148),²⁴⁸ kṛṣṇanālā (181),²⁴⁹ kṣīrakanda (193),²⁵⁰ kṣmāpālā (143), lajjakā (66),²⁵¹ mantrasipihāsana (122; 123), niśācara (78; 80; 81; 84; 87; 90; 92; 96; 145),²⁵² payovallī (59),²⁵³ puṣpī (6; 123),²⁵⁴ raktakañcukī (154),²⁵⁵ śambhu (61),²⁵⁶ śimhatuṇḍa (109),²⁵⁷ śukacañcu (162),²⁵⁸ suśīrakī (61),²⁵⁹ tṛṇajyotis (163cd–165),²⁶⁰ vajrakanda (156),²⁶¹ vartulaparnī (152), vellakāra (61),²⁶² and viścikā (155).²⁶³

The *Rasārṇavakalpa* contains a large number of geographical names. Regions mentioned are: Cyavana (613), Joṅgala (502), Kaṅkaṇaka (438), Nāgamaṇḍala (615; 654; 657; 667; 669), Pāṇḍava (613), and Pāriyātra (651). Cities and other places referred to are: Deūliyā (752), Karahāta (618),²⁶⁴ Ṭillāpada (612), and Ujjayinī (180). Names of rivers are: Bhagavatī (750),²⁶⁵ Candrabhāgā (653; 668; 680),²⁶⁶ Gaṅgā (180; 653; 668), Kulā (670), Narmadā (653; 693; 695), Pāra (651), Pārā (669),²⁶⁷ Sarasvatī (653; 669),²⁶⁸ and Śoṇa (672).²⁶⁹ Names of mountains are: Amarakaṇṭaka (703),²⁷⁰ Bhadra (= Meru; 751), Brahmagiri (751),²⁷¹ Candrakānta (429), Gandhaparvata (= Gandhamādāna; 703),²⁷² Gokaṇṭha (750),²⁷³ Hariścandra (703), Hemaprasṭha (429), Himālaya (428), Himavant (704), Jālandhara (428),²⁷⁴ Kapila (665; 666), Kardama (747), Karvura (654; 667; 668; 669; 680), Kumeru (427), Mahendra (503; 703),²⁷⁵ Malaya (502; 703), Mayūragira (618),²⁷⁶ Nṛsiṃha (752), Paryāṅka (749), Piṅgala (654; 668; 677; 699–701), Rkṣa (751),²⁷⁷ Sahya (752),²⁷⁸ Śrīśaila (703; 749),²⁷⁹ Sunanda (654; 667), Trikūṭa (704),²⁸⁰ Vindhya (428; 502; 751), and Vyāghra (667; 668).

These geographical names are regarded as indications that the *Rasārṇavakalpa* has been composed in the Vindhya region. This hypothesis is thought to be supported by the consideration that the *Rudrayāmalatantra* came into being in the Viṣṇukrāntā area, which extended from the Vindhyas to Chāṭṭala (i.e., Chittagong).²⁸¹

Date

Parts of the *Rasārṇavakalpa* are closely related to parts of chapter twelve of the *Rasārṇava*. Mira Roy and B.V. Subbarayappa expressed as their opinion that the *Rasārṇava* is posterior to the *Rasārṇavakalpa*, without claiming that the former borrowed from the latter, since indebtedness to a common source cannot be brushed aside easily. B.V. Subbarayappa is convinced that the *Rasārṇavakalpa*, on account of its emphasis on Tantric practices and its esoteric approach to alchemical procedures, dates from the be-

ginning of the flourishing period of Indian alchemy, i.e., in his estimate, the period A.D. 900–1100. He assigns the *Rasārṇava* to the twelfth, the *Rasārṇavakalpa* to the eleventh century. The terminus post quem is in his view the date of the *Rasaratnākara* (i.e., in his opinion, the eighth or ninth century), because one of the verses of this work forms part of the *Rasārṇavakalpa*;²⁸² this argument can be disregarded, because the pertinent verse is not from the *Rasaratnākara*, but from the *Rasendramaṅgala*.

It seems hazardous to assume that an unsystematic text of a compilatory character like the *Rasārṇavakalpa* may be dated rather accurately. The chronological position of the *Rudrayāmala*, to which it is said to belong, and the different versions of that text should therefore carefully be taken into consideration.

Chapter 11

Rasasaṃketakalikā to Rasendracūdāmaṇi

The *Rasasaṃketakalikā*

The *Rasasaṃketakalikā* by Kāyastha Cāmuṇḍa¹ is a treatise on alchemy and iatro-chemistry in 399 verses,² arranged in four chapters (ullāsa).

Contents³

The maṅgala is addressed to Śiva as the lord of mercury (Raseśa). Chapter one (49 verses) describes the mythical origin of mercury (1.2–4ab),⁴ the varieties of mercury (1.4cd–5ab), the doṣas and kañcukas (1.5cd–6), some saṃskāras (mardana, svedana, mūrchana, pātana, gandhakajāraṇa, bandha, māraṇa; 1.7–40), the properties of killed mercury (mṛtarasa) (1.41–46), the side effects of the use of mṛtarasa and their treatment (1.47–48), and the results of paying homage to the lord of mercury (1.49). Chapter two (65 verses) is concerned with the description of the six natural metals (loha), their properties, varieties, purification and killing (2.1–49), lohakiṭṭa (2.50–51), kharpara (= rasaka; 2.52–53), the purification and killing of some alloys (kāṇṣya and pittala; 2.54ab), the treatment of disorders caused by the metals (2.54cd), and the nirutthakaraṇa⁵ of the metals (2.55–57); the chapter ends with the description of abhṛaka, its varieties, killing, the extraction of its essence (sattvapātana), the killing of the essence,⁶ and the uses of the products obtained (2.58–65). Chapter three (16 verses) deals with viṣas⁷ and upaviṣas (3.1–9), opium (3.10–12), and bhṛṅgī (3.13–16). Chapter four (129 verses) is a collection of rasayogas to be employed against various diseases and for rasāyana and vājīkaraṇa purposes. Chapter five (40 verses) contains formulae for pills (guṭikā; 5.1–30) and some other preparations (5.31–40).⁸

Sources are not referred to. Cāmuṇḍa mentions the saṃpradāya of his guru (4.85 and 91).

The *Rasasaṃketalikā* is quoted in the paribhāṣā pariśiṣṭa of the *Ānandakanda*, the *Āyurvedābhdhisāra*, Caturbhujamiśra's commentary on the *Rasahr̥daya*, Khare's commentary on the *Rasaratnasamuccaya*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Rasakāmadhenu*, the *Rasamitra*, the *Rasāmṛta* of Yādavjī Trikamjī, the *Rasāyanasaṃgraha*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. It is one of the sources of the *Āyurvedaprakāśa*, *Bheṣajasaṃhitā*, *Pāradasaṃhitā*, and *Rasayogasāgara*.

A commentary on the *Rasasaṃketalikā* by Somadevaśarman is recorded.⁹

Special features

Four varieties of mercury are distinguished, named after the four varṇas (brāhmaṇa, kṣatriya, vaiśya, sūdra; 1.4cd). Five naisargikadoṣas and seven kañcukas are mentioned; their names are not enumerated (1.5cd–6). Eighteen saṃskāras are referred to, but only a few, which are easily carried out, are described (1.7). Four types of rasabandha are mentioned: pāṭa¹⁰ or parpaṭikābandha, khoṭa or piṣṭibandha, jalaukā or pakvabandha, and bhasmākhyā (1.16–17). The preparation of two varieties of rasabhasman, ūrdhvaga- and talabhasman (1.18–28ab),¹¹ is described, as well as the preparation of five varieties which differ in colour: rakta, pīta, kṛṣṇa, nīla, and pāṇḍurāruṇa (1.28cd–33).¹² The six natural metals are gold, silver, copper (arka), tin, lead and iron (2.1); bronze (ghoṣa or kāmṣya) and brass (āvartaka or pittala) are alloys (2.1). Five varieties of gold are distinguished (prākṛta, sahaja, agniya, khaniya and rasavādottha; 2.4–5), three varieties of silver (sahaja, khaniya, kṛtrima; 2.10), two varieties of copper (nepāla and mleccha; 2.14) and of tin (khuraka and miśraka; 2.25). Three types of iron are mentioned: muṇḍa, tīkṣṇa and kānta; muṇḍa has three varieties (mr̥du, kuṇṭha, kāṇḍāra), tīkṣṇa six (kharasāra, hotrāsa, tārāvarta, biḍa, kālaloḥa, gajākhyā), and kānta four (romaka, bhrāmaka, cumbaka, drāvaka) (2.34–37). Zinc is not mentioned as one of the metals, but kharparasattva is described (2.52–53).¹³

Four varieties of mica (abhraka) are distinguished (pīta, sita, asita, and rakta, called respectively pināka, dardura, nāga, and vajra; 2.58–59). A nīlakaṇṭhamantra accompanies the killing of poisons (3.3–4ab). Upaviṣas mentioned are vajra, arka, heman, halinī, hayāri and viṣamuṣṭikā (3.9).¹⁴ Four varieties of bhṛṅgi¹⁵ are distinguished; their flowers are white, red, yellow and dark (kṛṣṇa) (3.13–15).

The rasas of chapter four are not arranged according to a particular scheme. One of the formulae is also found in Cāmuṇḍa's *Jvaratimirabhāskara*.¹⁶ Divine or human authorities to whom rasayogas are attributed are: Bhairavānanda,¹⁷ Brahmā,¹⁸ Nāgārjuna,¹⁹ and Rudra.²⁰ One formula²¹ is said to have been of profit to Ghaṭaśravas,²² Kumbhayoni,²³ Vṛkodara,²⁴ Śanaīścara,²⁵ Sahasradṛṣ,²⁶ Pañcamukha,²⁷ and Caturmukha.²⁸

Some of the rasayogas may be original contributions of Cāmuṇḍa, because they are not found in earlier works.²⁹

Noteworthy items of the materia medica are: ākalla(ka) (4.129; 5.12), jambhala (2.61), jhaṣanayana (2.61), malapū (1.38),³⁰ phaṭakī (1.40),³¹ phitkarī (4.83 and 127),³² and sora (4.83).³³

Śaṅkhadrāva was known to Cāmuṇḍa (4.38–89).

The Rasasāra

The *Rasasāra* by Govindācārya³⁴ is a treatise almost entirely devoted to alchemy.

*Contents*³⁵

The work consists of 940 verses, arranged in twenty-six chapters (paṭala).

Chapter one (rasapūjāśvarūpastuti; 21 verses) is in praise of mercury and contains a number of mantras.³⁶ Chapter two (dravyasaṃgraha; 19 verses) enumerates the

items of an alchemist's equipment. Chapter three (anukramaṇikā; 17 verses) lists twice twenty-four saṃskāras. Chapter four (aṣṭacatvāriṃśatsaṃskāra; 13 verses) is about the doṣas of mercury, its purification, and the effects of a number of saṃskāras. Chapter five (rasaśodhanasaṃskāra; 69 verses) describes the details of śodhana (1–12), svedana (13–15), mardana (16), murchana (17–21), utthāpana (22–25ab), pātana (25cd–36ab), bodhana (36cd–50ab), niyamana (50cd–56ab), and nirodhana (56cd–69) of mercury. Chapter six (rasalohaśuddhisattvapātana; 39 verses) deals with the purification of the rasas and uparasas and the extraction (pātana) of their essences, the extraction of the essences of bhūnāga,³⁷ kānta (13–15ab), caura, hīngula, śilā, kāṅksī, kāsīsa and tālaka (15cd–33), as well as with the purification of sulphur (34–39). Chapter seven (sattvasthirīkaraṇa; 14 verses and a half) is about processes which make the sattvas, after their extraction, stable (sthira). Chapter eight (drutipātanañāguṇanirūpaṇa; 59 verses and a half) is concerned with the liquefaction (druti) of the sattvas of the rasas and uparasas, the druti of the lohas, ratnas, etc.; some groups of substances are also dealt with: tailavarga (32cd–34),³⁸ vasāvarga (35–36ab),³⁹ raktavarga (37–41), amlavarga (44cd–47ab), auśadhīkṣāraṇa (48–51), biḍas (52cd–58). Chapter nine (kṣāradrāvabīḍapākadivyaauśadha; 28 verses) gives an account of raṅgākṣī or raṅgadruṭi, an art the author learnt from Tibetan Buddhists, followed by the preparation of a biḍa and the enumeration of herbs which are useful in the jāraṇa, māraṇa and bandhana of mercury. Chapter ten (ratnalakṣaṇadrāvāṇabhedanamelāpāka; 50 verses and a half) describes the ratnas and their varieties, their drāvāṇa (= druti), māraṇa (or bhedana), and melana (mixing). Chapter eleven (bijapāka; 57 verses) describes a number of bījas, which are helpful in the process called jāraṇa, and the pāka of the bījas. Chapter twelve (mahārasajāraṇādividhi; 95 verses) is concerned with cāraṇa, garbhadruti, jāraṇa of a grāsa added to mercury, ratnadrutimela, rañjana, bandhana (mūṣābandha), sāraṇa, pratisāraṇa, krāmaṇa, and vedha (also called praveśa). Chapter thirteen (vedhādikrama; 27 verses) describes several types of vedha; udghāṭana is also dealt with (22–26ab). Chapter fourteen (dvandvamārapiṣṭistambhananigaḍabandhanasaṃkalikāyogadrutikarmādinirūpaṇa; 35 verses) gives an account of dvandvamela (mixing two substances) and dvandvamāra (killing of this mixture) (2–8), piṣṭistambhana (9–17ab), nigaḍabandhana (17cd–20), saṃkalī (21–33) and druti (34–35). Chapter fifteen (rasoparasalohakarman; 34 verses and a half) describes operations leading to transmutation (vedha), in which several sattvas of rasas and uparasas, such as those of vaikrānta of various colours and of vimala, are important. Chapter sixteen (ratnaprayoga; 22 verses) is about the uses of ratnas, their kalkas (pastes), etc., as bījas in the making of gold and silver. Chapter seventeen (anekakalkabheda; 45 verses) describes the kalkabandhana of mercury; the poisonous substances are enumerated; methods to achieve auri- and argentification by means of poisonous substances are dealt with. Chapter eighteen (maṇimūṣākarmadala; 24 verses) is about the uses of gems (maṇi) and the transmutation of metals. Chapter nineteen (guṭīkākathana; 12 verses and a half) is devoted to the preparation of two varieties of guṭīkā, called kāmadhenu, which convert base metals into gold and make one obtain a divine and invulnerable body. Chapter twenty (anekaguṭīkāḍīnāṇī sādhanopāyaḥ; 47 verses) describes several guṭīkās which confer longevity, the ability

to fly (khecaratva), invisibility, invulnerability, etc.; even the dead may be resuscitated by means of these pills. Chapter twenty-one (krauñcayogapakṣakarmadivyaauśadhi; 68 verses and a half) is concerned with the uses of animal products (krauñcayoga; 1–8ab) in alchemical operations and with divine herbs (divyaauśadhi; 8cd–59) and their uses. Chapter twenty-two (yantramūṣā; 20 verses and a half) describes yantras and other implements used in an alchemical workshop. Chapter twenty-three (mahārasasevana; 31 verses) is about rituals to be performed before using mercurial products that lead to dehasiddhi. Chapter twenty-four (rasāyanakathana; 16 verses) describes rasas which may be used for curing diseases and for rasāyana purposes. Chapter twenty-five (dhātumārāṇaprayoga; 28 verses) is concerned with the killing of metals and essences (sattva). Chapter twenty-six (mahārasasevā; 46 verses) is about the consumption of mercurial preparations and the wonderful effects obtained.

The *Rasasāra* is quoted in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, Gulrājśarmamiśra's commentary on the *Āyurvedaparakāśa*, Hazārīlāl Sukul's and Khare's commentaries on the *Rasaratnasamuccaya*, the *Pāradasaṃhitā*, *Rasajalanidhi*,⁴⁰ *Rasakāmadhenu*, *Rasamitra*, *Rasāyanasaṃgraha*, *Ratnākaraauśadhayogagrantha*, *Rasatatvavivecana*, Somadevaśarman's commentary on the *Āyurvedaparakāśa*, and Ṭodara's *Āyurvedasaukhya*.⁴¹ The work is one of the sources of Hariprapanna's *Rasayoga-sāgara*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, and Yādavjī Trikamjī's *Rasāmṛta*.

Govindabhikṣu is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaparakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The pūjā of mercury (rasarāja) should be performed by the alchemist in the company of a female associate (1.8–11). Chapter two lists eight dhātus: gold, silver, copper, iron, tin, lead, rīṭikā (brass), and kāṁsyaka (bronze) (2.4),⁴² and nine gems: vajra, muktāphala, padmarāga, nīlaka, marakta,⁴³ puṣparāga, medas,⁴⁴ vaidūrya, and vidruma (2.5).⁴⁵ Some implements used in the laboratory are: piṇḍikā (2.8; 22.18),⁴⁶ kaṇḍanī (2.8),⁴⁷ retanī (2.9; 22.15),⁴⁸ hatodī (2.9),⁴⁹ kañī (2.9; 22.15),⁵⁰ chinnī (2.9),⁵¹ arhiṇī (2.9; 22.16),⁵² ghana (2.9),⁵³ saṃdaṃśanī or saṃdaṃśinī (2.9; 22.14),⁵⁴ and dīrghasaṃdaṃśika (12.14).⁵⁵

The unusual series of forty-eight saṃskāras of chapter three consists of: (1) rasoparasaśuddhi, (2) lohaśuddhi, (3) sattvadrāvaṇa, (4) sattvasthirīkaraṇa, (5) drutipāta, (6) raṅgākṛṣṭi, (7) ratnalakṣaṇa, (8) ratnadrāvaṇa, (9) dhātuśodhana, (10) ratnamelāpana, (11) bijapāka, (12) garbhadruṭi, (13) jāraṇa, (14) drutimelāpana, (15) rañjana, (16) bandhana, (17) sāraṇa, (18) māraṇa, (19) pratisāraṇa, (20) krāmaṇa, (21) vedha, (22) udghāṭana, (23) vikraya, (24) piṣṭistambhana, (25) bandha and nigadabandha, (26) saṅkalīkaraṇa, (27) rasoparasalohakarman, (28) ratnaśodhana, (29) vaṅgadoṣavināśa, (30) kālikāvijaya, (31) kalkabhedh, (32) viṣakarman, (33) maṇimūṣāśrayakarman, (34) dalādīkaraṇa, (35) kāmadhenuguṭīkāḥ, (36) vayaḥstambha, (37) khecarī, (38) divyaguṭīkāḥ, (39) krauñcayogāḥ and pakṣīkarman, (40) auśadhīkalpa, (41) yantrabhedh, (42) mūṣābandhāḥ, (43) āyudhāni, (44) rasarājāsvedana, (45) dhātumāraṇa, (46) dehasaṃkrāmaṇa, (47) bhojana, and (48) caryā.⁵⁶

The series of eight saṁskāras described in chapter five, though more in line with what is usually found in rasaśāstra texts, presents some uncommon features: śodhana is the first saṁskāra; dīpana is absent; bodhana and nirodhana are two distinct saṁskāras. The verses on pātana give an account of ūrdhvaṇipātana only. A number of doṣas and kañcukas of mercury are referred to in chapter four: bhūmidoṣa, darpa(doṣa), kālīkā, kāpālī, maladoṣa, nāgadoṣa, saṇḍadoṣa, stikṣmadoṣa, unmatta, vaṅgadoṣa, viṣa, and aśmakañcuka. A number of saṁskāras have to be continued for a period of twenty-one days (5.13–15: svedana; 5.16: mardana; 5.22–25ab: utthāpana; 5.36cd–50ab: bodhana; 5.50cd–56ab: niyamana; 5.56cd–63: nirodhana).⁵⁷

The uparasas consist of vaikrānta, sasyaka, tāpya (= mākṣika), kāca (v.l. kanta),⁵⁸ abhra, vimala, giri,⁵⁹ gairika, tutthaka, and rājāvarta (6.8–9a).⁶⁰ The extraction of the essence of bhūnāga is said to be carried out in the same way as the extraction of the essences of the uparasas (6.13ab), but a different procedure is employed in the extraction of the essence of kanta (6.13cd–14). The substance usually called rasaka is referred to as caura in the *Rasaśāstra*;⁶¹ its essence is designated by the term kharparikā (6.17).⁶² The sthīrīkaraṇa or sattvabandha (7.10) of the essence of caura (= rasaka) is the model for this type of process, carried out by means of the cakrayantra or cakrarāja.

Chapter nine is concerned with the colouring of mercurial products (raṅgākṛṣṭi, raṅgadrāva), the technique of which is described in detail. It opens with the declaration that raṅgākṛṣṭi will be described, a subject not dealt with elsewhere in alchemical literature. The author mentions that Buddhists living in Tibet (Bhoṭadeśa) are acquainted with this technique (9.2). The same chapter enumerates three series of eight plants to be employed in the jāraṇa, bandhana and māraṇa of mercury (9.24cd–28). These groups consist of: agnidamanī, haṁsapādī, kumārī, lāṅgalī, mocā, sirṁhī, vajrī, and vyāghrī (9.24cd–25); brahmadaṇḍī, mudgapatrī, rudantī, śaṅkhī, tridaṇḍī, triśūlī, vajrī, and vānarī (9.26–27ab);⁶³ kākāhvā, kākamācī, kākatuṇḍī, kālāñjanī, kālīkā, kañcukī, karkoṭī, and kaṭutumbī (9.27cd–28).⁶⁴

Chapter ten mentions five defects (doṣa), five qualities (guṇa), and four colours (chāyā) of diamonds (vajra) (10.2–4). The usual eight origins of pearls (muktāphala) are enumerated (10.5–6ab). The other gems are of four types: brāhmaṇa, kṣatriya, vaiśya and śūdra (10.8); the brāhmaṇa types are used in making silver, the kṣatriya types in making gold (10.19); a specific method of killing is required for each of the four types (10.35–41).

Chapter eleven refers to rā and rīrī as substances used in the preparation of bījas.⁶⁵

Chapter twelve describes sāraṇa and pratisāraṇa, but omits anusāraṇa. The verses on mūsābandha refer to a series of products of this process, called daṇḍadhārin, pāyasākṛti, jālaukākāra, aviṣa, chedin, dadhivat, and navañitābha (12.42–44ab).⁶⁶ The substances belonging to the krāmaṇagaṇa are enumerated: madhūchhiṣṭa (bees-wax), madhuka, madhūka, taṅkaṇa, sitā, aśvakarṇamala, guñjā, keśāḥ (hairs), chucchundarī-vasā,⁶⁷ strīrajas, strīpayas (breastmilk), śukra, indragopa, bhūlatā, vasā, tāla, śilā, gandha, sārīvā, kṣīrīṇī, viṣa, hayārī, nābhī, karpūra, snuḥī, arka, kṣīrakandaka, sarja, mṛtanāga, guḍa, guggulu, and tutthaka (12.85cd–88). The concluding verses of chapter twelve (12.89–94) are in praise of the miraculous effects of processed mercury, which transmutes the metals hidden in mountains, and makes the adept into a second Śaṁ-

kara.

Chapter thirteen enumerates the types of vedha (13.1–3).⁶⁹ The items of the group called pañcamṛd are enumerated: khatikā, lavaṇa, gairī, kāṅkṣī, and iṣṭikacūṭṛaka⁷⁰ (13.26cd–27ab). Chapter fourteen refers to an agniśomākhyayantra (14.4).

Chapter seventeen mentions five types of bandha (mṛtabandha,⁷¹ jīvabandha, khoṭa, pāta, jalaukā; 17.5), five types of avasthā (dhūma, ciṭiṭi, maṇḍūkapluti, kampa, atibhrama; 17.7),⁷² and ten failures (vikriyā) of practice (17.11cd–13ab). The ten vikriyās, also called śaṇḍahajātis, are: kṣudhita, atinirāhāra, aśuddhalohajāraṇa, akrāmaṇa, atigrāsa,⁷³ biḍahīna,⁷⁴ biḍādhika,⁷⁵ śītatva, ativahnitva, and devatāvighna. Eighteen poisonous substances are listed: mayūra, kālakūṭa, saktuka, binduka, vatsanābha, sunābha, śaṅkhanābha, sunirmala, bhṛṅga, karkoṭaka, musta, puškara, śuklakandaka, raktaśṛṅga, haridra, cakra, hālāhala, and bhrāmara;⁷⁶ these poisons are divided into four brāhmaṇa, four kṣatriya, four vaiśya, and six śūdra types (17.21cd–25ab), employed in making silver (the brāhmaṇa types) and gold (the kṣatriya and vaiśya types), and in curing diseases (the śūdra types) (17.25cd–26ab). Chapter seventeen also describes four varieties of ahiphena, a substance produced by poisonous marine fishes (17.36–38); according to another view, ahiphena is a kind of froth (phena) produced by a snake.⁷⁷

Chapter eighteen refers to three types of maṇi: sūryakānta, candrakānta and tārakānta.

Human flesh (naramāṃsa) is one of the substances required for the preparation of the guṭikā called kāmadhenu (19.3, 6, 8) and other pills (20.20). Particular animals or their organs are essential in the preparation of the pills described in chapter twenty.⁷⁸ Substances of animal origin are necessary for the krauñcayogas of chapter twenty-one.

Plants used in alchemical operations are classified as tṇa, gulma, latā, vallī, vrkṣa and ativisarpiṇī (21.10). Sixty-four of these plants are described: ajagarī, alpapatrī, aśokanāmnī, āsurī, bhṛṅgā, bhūkadambā, bhūtakeśī, bilvātakī, brahmadandī, chattrī, devī, garuḍī, gomārī, gonasī, gorocanā,⁷⁹ gośṛṅgā, hemalatā, īśvarī, jalajā padminī, jātakī, jayā, kākapakṣā, kaṭutumbī, kṛṣṇacitraka or gopana, kīṭamārī, kṛṣṇavallī, kṣīratatā, kṣīriṇī, laśunī, mayūraśikhā, nāginī, palāśalatikā, payasvinī, pīṭakṣīrā, punnāgapattrikā, rajanī, raktacitraka, raktakṣīrā, raktaparnī, rohiṇī, rudantī, śalyā, sāmarī, śambarā, śambārī, saptaparnī, siṃhikā, somadandī, somalatā, somavallī, śrīnāmnī, tridandī, trijaṭā, triśūlī, trivallī or raktamālā, tumbī, vajravallī, vajrī, vārāhī, vijayā, vīrā, viśalyā, vyāghrapāḍalatā, and vyāghrī (21.11–59).⁸⁰

Some of the rasas of chapter twenty-four are hemendra-, nāgendra-, tāmrendra-, and vaṅgendrarasa.

Chapter twenty-six describes rules pertaining to diet and behaviour to be observed by the sādhaka. An important prerequisite for the attainment of siddhi is the prevention of impregnation during sexual intercourse; it is therefore recommended to make one's sexual partner infertile (26.12–14ab).

Some yantras mentioned in the *Rasaśāra* are cakrayantra (5.25ab and 35; 6.29; 9.16; 14.3)⁸¹ or cakrarāja (12.23; 17.3 and 29; 22.3; 24.3 and 8), jalakūrma (12.25 and 37), jalyantra, and sthalakūrma (12.35 and 37).

Haṇsa is a term frequently employed to designate hinguḷa (6.32 and 33; 7.1, etc.).

Laddi is often used in the sense of laṇḍa, a firm animal excrement (7.5; 8.5, 6, 13; 10.30, etc.).

The author

The author mentions his name, Govinda or Govindācārya, several times in his treatise.⁸² He was a grandson of the brāhmaṇa Sahadeva of the Moḍha jñāti, an expert in all the sciences and a mantrasiddha, and a son of Surāditya. He describes himself as a Śiva worshipper and a pupil of Dhīradeva, a specialist in alchemy. Dhīradeva was a Sārasvata brāhmaṇa, born in the Antarvedī country,⁸³ and a son of Abhayapāla.⁸⁴

A Kirāteśa, referred to in the introductory verses (1.13),⁸⁵ is probably a deity,⁸⁶ since he is mentioned together with the guardians of the quarters of the sky (dikpāla) and Bhairava.

A *Ṣaṃnipātamañjarī* is sometimes ascribed to the author of the *Rasasāra*.⁸⁷

Govindācārya is quite distinct from Govindabhagavatpāda, the author of the *Rasahr̥daya*.

Date

The *Rasasāra* is usually assigned to the thirteenth,⁸⁸ fourteenth,⁸⁹ or fifteenth century.⁹⁰ The only evidence for its date consists of the quotations in Ṭoḍara's *Āyurvedasaukhya*.

The Rasatarāṅgiṇī

The *Rasatarāṅgiṇī* by Sadānandaśarman⁹¹ is a systematic treatise on alchemy in the service of medicine.

Contents

The *Rasatarāṅgiṇī* consists of about 3,650 verses, arranged in twenty-four chapters (tarāṅga). The subjects of the chapters are: (1) the laboratory (rasaśālā; 38 verses); (2) technical terms (paribhāṣā; 74 verses); (3) the mūṣās and puṭas (50 verses); (4) the yantras (62 verses); (5) the doṣas and kañcukas of mercury (5.7–13); the purification of mercury (5.14–37); the extraction of mercury from cinnabar (5.38–42); the eight ṣaṃskāras: svedana, mardana, murchana, utthāpana, pātana, bodhana, niyāmana, and dīpana (5.43–99); gandhakajāraṇa (5.100–108); (6) murchanā (6.2–8);⁹² the preparation of mugdharasa (6.9–19),⁹³ rasapuṣpa (6.20–58), sikthataila (6.59–64),⁹⁴ rasakarpūra⁹⁵ and rasakarpūradrava (6.65–106), kajjalī (6.107–134), rasaparpatī (6.135–161), rasasindūra (6.162–237),⁹⁶ makaradhvaja (6.238–248), and the yellow bhasman of mercury (6.249–255),⁹⁷ together with their medicinal uses; (7) the killing of mercury; the uses of mercurial ashes (mr̥tasūta); kṣetīkaraṇa; rules concerning the use of mercurial products for rasāyana purposes (111 verses); (8) sulphur (gandhaka), its purification, the medicinal uses of purified sulphur (8.1–65); ten gandhakakalpas (8.66–93); the preparation of gandhakataila (8.94–112) and gandhakadrava (sulphuric acid; 8.113–123); (9) cinnabar (hiṅgula), its purification and uses (62 verses);⁹⁸ (10) mica (abhraka), its varieties, purification and killing; the amṛtīkaraṇa of the bhasman⁹⁹ and its uses,¹⁰⁰ the extraction of the sattva of abhraka, its purification, killing and

uses (127 verses); (11) haritāla, its purification, killing¹⁰¹ and uses, the extraction of its sattva and the uses of this sattva (11.1–103); manāḥśilā, its purification, uses and sattvapātana (11.104–129); śaṅkhavisa (= gauripāṣaṇaka, mallaka, somala), its purification and uses (11.130–176); the properties and uses of tuvarī (11.177–207),¹⁰² khaṭikā (11.208–214), cūrṇa¹⁰³ and cūrṇodaka (11.215–229), dugdhapāṣaṇa (11.230–236), and godanta (11.237–242);¹⁰⁴ (12) śaṅkha,¹⁰⁵ its purification and killing, the uses of śaṅkha and mṛtaśaṅkha (12.1–34); śaṅkhadrāvaka and its uses (12.35–56); the purification, killing and uses of kṣudraśaṅkha (12.57–63), śukti (12.64–78), jalaśukti (12.79–81), varāṭaka (12.82–102),¹⁰⁶ and śṛṅga (12.103–109);¹⁰⁷ the properties, uses and origin of samudraphena (12.110–126); (13) the preparation of three caustics (kṣāra): yavakṣāra (and nimbūkāmlīyayavakṣāra; 13.1–41), sarjikṣāra (and nimbūkāmlīyasarjika; 13.42–71) and ṭaṅkaṇa (and ṭaṅkaṇāmla; 13.72–122), their properties and uses; (14) other caustics: navasāra¹⁰⁸ (and its sattva; 14.1–26), soraka (and sorakadrāvaka; 14.27–58),¹⁰⁹ apāmārgakṣāra, arkakṣāra, tilakṣāra, snuḥikṣāra, palāśakṣāra, and ciṅcākṣāra (14.65–116); the salts: saindhava, nārikelalavaṇa, arkalavaṇa, sāmudra, viḍa, sauvarcala, and romaka (14.117–164); the preparation of lavaṇadrāvaka and its uses (14.165–184); (15) metals in general (15.1–7) and gold¹¹⁰ (suvarṇa; 15.8–116); (16) silver (rajata; 123 verses);¹¹¹ (17) copper (tāmra; 17.1–116),¹¹² the extraction of bhūnāgasattva and its māraṇa (17.117–122), the extraction of the essence of mayūrapiccha (the tail-feathers of a peacock; 17.123–124); (18) tin (vaṅga) and suvarṇavariga (105 verses);¹¹³ (19) lead (śisaka; 19.1–93)¹¹⁴ and zinc (yaśada;¹¹⁵ 19.94–170), their purification, killing and uses; (20) iron (lauha), its varieties, their purification, killing and uses (20.1–122);¹¹⁶ maṇḍūra, its purification, killing¹¹⁷ and uses (20.123–140); (21) the upadhātus, their purification, killing and uses, their sattvas and the killing of the sattvas; the upadhātus consist of: mākṣika (21.1–70),¹¹⁸ tuttha (21.71–147),¹¹⁹ (giri)sindūra (21.148–164), mṛddāśṛṅga (21.165–180), rasaka or kharpara (21.181–214),¹²⁰ kāntapāṣaṇa (21.215–226), and kāsīsa (21.227–260);¹²¹ (22) the alloys (pittala and kāṁṣya), their purification, killing and uses (22.1–34); the purification and uses of the añjanas (22.35–59), śilājatu (22.60–109), and gairika (22.110–132);¹²² (23) the mahāratnas, their purification, killing and uses: hīraka (diamond; 23.5–42), māṇikya (ruby; 23.43–62), mauktika (pearl; 23.63–86), puṣparaṅga (topaz; 23.87–95), nīla (sapphire; 23.96–103), marakata (emerald; 23.104–111), vaidūrya (cat's eye; 23.112–119), gomeda (zircon; 23.120–127), and vidruma (coral; 23.128–153);¹²³ the kṣudraratnas, their purification, killing and uses: vaikrānta (23.155–181), sūryakānta (23.182–186), candrakānta (23.187–190), rājāvarta (23.191–207), peroja (23.208–210), and sphatika (23.211–215); (24) the viṣas and upaviṣas, their purification¹²⁴ and uses; the eight poisons unsuitable for alchemical purposes and for rasāyana are: hālāhala, kālakūṭa, śṛṅgaka, pradīpana, saurāṣṭrika, brahmaputra, hāridra, and saktuka (24.7–9); vatsanābha is a useful poison (24.10–162); the upaviṣas are: viṣatinduka (24.165–233), ahiphena (24.234–305), jayapāla (24.306–341), dhātūra (24.342–390), bhaṅgā (24.391–436), guṇjā (24.437–470), bhallātaka (24.471–486), karavīra (24.487–495), lāṅgalī (24.496–509), arkakṣīra (24.510–515), and snuḥikṣīra (24.516–530); snake venom is described, together with its purification and uses (24.531–574); the chapter ends with the purification of the

roots of raktacitraka, the seeds of vṛddhadāraka and nimbūka, the purification of hingu and guggulu (24.575–580).

Sources are not indicated. Caraka is mentioned once (15.92).¹²⁵

Sadānanda's teacher, Narendranātha, is referred to once (6.37–38).¹²⁶

Sadānanda's *Rasatarāṅgiṇī* is quoted in Ambikādatṭaśāstrin's commentary on the *Rasendrasārasaṅgraha*, the *Āyurvedīya Khanijavijñāna*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and the same author's *Viśikhānupraveśavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the bhasmapīṣṭiprakaraṇa of the *Rasoddhāraṇtra*, and Somadevaśarṇan's commentary on the *Āyurvedaprakāśa*; it is one of the sources of the *Bheṣajasaṃhitā*, *Rasayogasāgara*, *Rasendrasambhava*, and Yādavjī Trikamjī's *Rasāmṛta*. The *Rasatarāṅgiṇī* is profusely quoted in Saṃtoṣ Kumār Śarmā's *Rasabhaiṣajyakalpanāvijñāna*.

Sadānanda is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The verses of the *Rasatarāṅgiṇī* are composed by the author himself.

Rasasiddhas enumerated are: Agastya,¹²⁷ Bhairava, Bhāskara, Brahmā, Gorakṣanātha,¹²⁸ Govinda, Kākacaṇḍīśvara, Kāpālika, Laṅkeśa, Māṇḍavya, Manthāna-bhairava, Maṭṭa, Nāgabodhi, Nāgārjuna, Nandin, Naravāhana, Narendra, Ratnakośa, Śambhu, Śaṃkara,¹²⁹ Svacchandabhairava, Viśārada, Viṣṇu,¹³⁰ Vyāḍi, and Yaśodhana (1.29–32).

Noteworthy yantras described are: bhasmayantra (4.16–17), mṛdaṅgayantra (4.–27), bāṣpasvedanayantra (4.35–38), and darvikāyantra (4.39). Many synonyms of the substances dealt with are enumerated. Two varieties of hinguḷa are mentioned, khaniḷa and kṛtrima (9.4), and two varieties of gaurīpāṣāṇa, white and red (11.132). The nārikelalavaṇa (14.123–130) and arkalavaṇa (14.131–136) are peculiar to the *Rasatarāṅgiṇī*. Varieties of muṇḍa-, tīkṣṇa- and kāntaloḥa are not distinguished (20). The upadhātus distinguished are: suvarṇamākṣika,¹³¹ rajatamākṣika,¹³² tutthaka, sindūra, mṛddāśrṅga, kharpara or rasaka, kāntapāṣāṇa, and kāśīsa (21). Two types of añjana are distinguished: mecaka or srotoja (= sroto'njana) and locaka or suvṛāja (= sauṇvīra) (22.35); puṣpāñjana is added (22.49–50). Four varieties of śilājātu are described: sauvarṇa-, rājata-, tāmbra- and lauhaśilājātu (22.64–68), and two varieties of gairika: pāṣāṇa- and svarṇagairika (22.111).¹³³ A number of rasayogas may be peculiar to the *Rasatarāṅgiṇī*.¹³⁴ Types of pearls are not mentioned. Three varieties of vatsanābha are distinguished: kṛṣṇa, kapiśa and pāṇḍu (24.15). Opium is called ahiphena and khasilaniryāsa (24.237, 241); tinctura opii is described as ahiphenāsava (24.287–297).

Plants and other substances employed in the killing of mercury are: ākhukarṇī, bahuputrikā, balā, bhṛṅgarāja, brahmadaṇḍī, cakramarda, cāṇḍālīnī, devadālī, dhūrta, dūrvā, girikarṇikā, guḍūci, haṃsapāṇī, hastiśuṇḍikā, indravāruṇikā, jāṭī, jayantī, jvalana, kākaṇḍā, kākamāci, kākanāsā, kaṇā, kaṭutumbikā, koṣātakī, lajjālu, lākṣā, lāṅgalī, maṇḍūkapaṇī, matsyākṣī, mūrvā, musalī, nīpa, the two kinds of niśā, palāśa, prasārīnī, punarnavā, rāmaṭha, rambhā, sahaddevikā, samantadugdhā, śaṅkhaṇḍikā,

śarapunkhikā, sarpākṣī, sarṣapa, śaśīlekḥā, śephālī, śobhāñjana, somavallārī, suṇṭhī, surasā, sūrya, sūryabhaktā, tilaparṇikā, vacā, vandhyakarkotakī, varṣābhū, vidārikā, viṣṇukrāntā, and yamaciñcikā (7.9–16).

Plants and other substances employed in the killing of mica are: agastya, agnimanthā, ākhuparṇī, bhadramustā, bhṛṅgarāja, bilva, bṛhatī, citraka, cow's urine, dāḍīma, devadāru, dhattūra, dūrvā, eraṇḍa, ghoṇṭā, ghṛtakumārīkā, goat's blood, gokṣura, guḍa, guḍūcikā, hilamocikā, jalakumbhikā, kadambaka, kākamācī, kaṇṭakārī, kāsamarda, kharamañjarī, kokilākṣaka, the three kinds of milky juice (kṣīratraya), lodhra, madana, mālātī, maṇḍūkapaṇṇī, māriṣa, mātulānī, mīnākṣī, mustā, nāgavallī, pālānyā, pātālī, phalatrika (= triphalā), piṇḍī, prśniparṇī, rambhā, śāliparṇī, śaṅkhapuṣpī, saptapaṇṇa, śrīparṇī, śuklasiddhārthaka, śvetapunarṇavā, śyonāka, tagara, tālamūlī, tālīśa, taṇḍulīyaka, tiktakā, tilaparṇī, tulasī, vājigandhā, vastrarañjanī, the young shoots of the vata, and vṛṣa (10.56–64).¹³⁵

Plants used in the killing of iron are: bhṛṅga, candana, daśamūla, eraṇḍa, hastikarṇapālāśa, hriṇbera, karañja, nīlotpala, nirguṇḍī, parpaṭa, punarṇavā, śatamūlī, śīgru, siṃhikā, surasa, tālamūlikā, triphalā, viḍaṅgaka, viśva, and vṛddhadāraka (20.42–44).

Terms derived from modern chemistry are not uncommon; examples are: bindu-kṣepakayantra (20.160; dropper), caṇakāmla (15.25; oxalic acid), gandhakadrāva (8.113–123; sulphuric acid), gandhakāmlīyayaśada (19.149–166; zinc sulphate), lavaṇadrāva (14.165–184; hydrochloric acid), maṣīśoṣaṇapattrā (24.317; blotting paper), nirjalā nirmalā surā (21.237; absolute alcohol), sārakapattrā (16.83 and 84; filter paper), sorakadrāvaka (14.47–58) and sorakāmlaka (16.77; nitric acid), sorakāmlīyarajata (16.76–123; silver nitrate), suvarṇalavaṇa (15.34–44; gold chloride), ṭaṇkaṇāmla (13.100–122; boric acid), and varṇapattraka (18.35; litmus paper).

Terms borrowed from western medicine and late āyurveda are, for example: antrāśoṣa (19.61), āntrikajvara (14.182; enteric fever), antrāvaraṇodbhūtajvara (24.43; peritonitis), asthivakratā (15.111; rachitis), ḍimbāśaya (16.59 and 61; ovary), granthikajvara (24.366 and 388; plague), granthīśoṭha (swelling of lymph nodes; 24.389), hrdayāvaraṇaśoṭha (24.43; pericarditis), māṃsatāna (20.89; diphtheria), phiraṅga (15.91), phupphusacchadaśoṭha (24.42; pleurisy), pūyameha (24.95; gonorrhoea), saṃkrāmakākāsa (24.408 and 417; whooping cough), śoṇakāyajvara (22.109; scarlet fever), svapnameha (6.120 and 226; 24.400; nocturnal emissions), tāṇḍavagada (20.89), vraṇameha (19.159),¹³⁶ vṛkkaśoṭha (20.87; 24.403), and yoṣāpasmarāka (15.94; 20.88).

Works and authorities quoted or referred to in Haridattaśāstrin's Sanskrit commentary¹³⁷ on the *Rasataṅgīṇī* are: Amara (3.38–39), Āyurvedaprakāśakāra (5.101), *Bhāvaprakāśa* (5.31), *Bhāvaprakāśīyanighaṇṭu* (24.307–309), Caraka (1.33–34; 24.369–378), dākṣiṇātyāh (10.3), *Dhanvantarīyanighaṇṭu* (18.84–95), Govindabhagavatpāda (5.106–108), *Jyotiṣśāstra* (23.3–4), Kauṭilya (3.38–39), Medinī (24.236), Nāgārjuna (20.22–24), navyarāśāyanikāh (19.149–151), Narendranātha (6.32–38), *Nighaṇṭu* (13.82–95; 24.131–140), Nityanātha (5.106–108), *Rājanighaṇṭu* (13.45–47), *Rasacintāmaṇi* (5.106–108), *Rasamādhava*¹³⁸ (5.106–108; 6.1; 10.116; 20.5–6 and 19; 21.55–56), *Rasapaddhati* (5.106–108; 21.64–65), *Rasaratnākara* (5.106–108), *Rasaratnasamuccaya* (1.18–27), *Rasāṇṇava* (5.106–108; 7.90–92), *Rasavāgbhaṭa* (4.1; 5.46; 6.7–8), Ra-

sendracūḍāmaṇi (5.101), *Rasendrasārasaṅgraha* (4.40), *Rudrādhyāya* (5.20), *Śāringadhara* (22.54–57), *Śāringadharasaṃhitā* (17.37–39), *Śivāgama* (5.106–108), *Suśruta* (6.113–128; 13.10–32; 22.88–109), *Vāgbhaṭa* (21.94–96; 22.69–78, 85–86, 88–109), *Vṛddhavāgbhaṭa* (22.85–86; 24.32–60), and *Yogarātnākara* (8.105–108; 21.66).

The author

Sadānanda Śarmaṇ Ghilḍiyāla was the son of Jīvānanda, an expert in jyotiḥśāstra, and Śarasvatī (1.2). His teacher, Narendranātha Mitra, assisted him in composing the *Rasatarāgiṇī* (1.5–8).¹³⁹

Sadānanda also wrote the *Pāradayogaśāstra* and a commentary on the *Rasakau-mudī*.¹⁴⁰

Date

The *Rasatarāgiṇī* was completed in 1923/24.¹⁴¹

The Rasāyanasāra

The *Rasāyanasāra* by Śyāmasundarācārya¹⁴² is a modern treatise dealing with iatrochemistry, in particular with the aspects pertaining to rasāyana.

Contents

The work consists of about 1,100 verses, arranged in five chapters (prakaraṇa). Chapter one is of an introductory character. Chapter two is concerned with the alchemical laboratory (rasāyanasālā; 1–28) and types of bhrāṣṭrī and puṭa (29–66); the puṭas described are gajāpuṭa, vārāhapuṭa and kukkuṭapuṭa.

Chapter three is about technical terms; its subjects are: nāṇḍī (2–5), kajjalī (6), bhāvanā (7), vālukā (8–9), a definition of mudrā (10), mṛtputa (11), saṃputa (12), svāṅgaśīta (13), types of mudrā (14–23), yantras (24–54), kāñjī (55–60), kṣāra (61–73), amṛtapañcaka (74),¹⁴³ mṛtapañcaka (75), biḍa (76), types of saṃpañīśa (77–79), and agnyākaraṣakadarvī (80).

Chapter four is concerned with: the eulogy of mercury (1–18); its purification (19–21); the preparation of mercury from cinnabar (22–45); sulphur, its varieties and purification (46–101); the stimulation of the appetite (bubhukṣā) of mercury, i.e., its ability to digest and assimilate other substances, and how to feed it (103–154); the preparation of several types of candrodāya (mixtures of mercury and sulphur): tālacandrodāya (183–198), śīlācandrodāya (199–209), mallācandrodāya (210–221), viṣācandrodāya (222–229), sattvacandrodāya (230–239), antardhūmacandrodāya (240–249), and various other ones (250–252); the preparation of makaradhvaṇa (256–261), svarṇasindūra (262–267), sindūrarasa (268–283), pravāśasindūra (284–294), mūrchanāśa (295–296), tālādicandrodāya (297–305), saṃgrahasindūrarasa (306–310), and rasakarpūra (311–321); the chapter ends with praising the mūrchā of mercury (322–324).

Chapter five gives an account of the purification and killing of the metals (dhātu) and upadhātus, together with allied topics. Its subjects are: the purification and

killing of gold (5–22), rasāyana formulae (23–26), the medicinal properties of gold (27), anupānas to be taken along with suvarṇabhasman (28), disorders arising from impure suvarṇabhasman and their treatment; the purification and killing of silver (31–36), the properties of rajatabhasman, a rasāyana, defects of rajatabhasman and their removal (37–41); the purification and killing of the naipāla variety of copper (46–58), the nirutthīkaraṇa and amṛtīkaraṇa of the bhasman of copper (59–68); the extraction (niḥsāraṇa) of copper from tuttha and its purification, the preparation of tuttha (69–79), other methods of killing copper (80–106), the purification of tāmrabhasman, its medicinal properties and the treatment of disorders caused by impure tāmrabhasman (107–109); the khura variety of tin, its purification and the description of the piṭharayantra used to purify tin, lead and zinc (116–133), the killing of tin (134–167), the medicinal properties of the bhasman (168), the anupānas to be taken (169–176), rasāyanas (177–181), disorders caused by impurities and their treatment (182–184); the purification and killing of lead (185–200), a rasāyana (201–205), the medicinal properties of the bhasman of lead (206), disorders due to impurities and their treatment (207–208); the purification and killing of zinc (jasada; 209–215), anupānas (216–217), disorders caused by zinc and their treatment (218–220); the killing of kāṇṣya and rājarīti (= pittala), followed by some rasāyana formulae (221–227); the purification and killing of the alloys called vṛta and vartaka (228–230); the purification and killing of iron (231–264), rasāyana formulae (265–271), the medicinal properties of lohābhasman (272–273), and the treatment of disorders caused by impure lohābhasman (274).

Three different opinions regarding the substances which should be regarded as upadhātus are referred to; the seven upadhātus consist of: (1) tāpya (= suvarṇamākṣika), vimala (= raupyamākṣika), tuttha, (ayo)mala (= maṇḍūra), kaṅkuṣṭha, sindūra, and netrya (= gairika); (2) svarṇamākṣika, tāramākṣika, sindūra, kāṇṣya, (śilā)jatu, tuttha, and rīti (= pittala); (3) nīlāñjana, mākṣika, tuttha, śilā(jatu), āla, rasaka, and abhra (275–277).

Chapter five continues with the following subjects: the purification and killing of suvarṇa-, raupya- and kāṇṣyamākṣika (278–284), the medicinal properties of these substances, the disorders caused by impurities left, and the treatment of these disorders (285–290); the purification and killing of naturally occurring and chemically prepared (khanija and kṛtrima) tuttha (291–294); the purification, killing and properties of kaṅkuṣṭha (295–297); the purification and properties of sindūra (298–299); the description of maṇḍūra, its purification and killing, the preparation of haṃsamaṇḍūra and maṇḍūravaṭī (300–314); the description of nīlāñjana (black in colour), puṣpāñjana (white in colour), rasāñjana, sauvīrāñjana (similar to nīlāñjana), and srotoñjana (similar to puṣpāñjana) (315–318), followed by the preparation of hitāñjana (319–320); the description of vajrakāśīsa, its killing and its properties (321–323); the description of vajrabhraka, its purification, niścandīkaraṇa,¹⁴⁴ killing, the plants used in this process, the properties of the bhasman, dhānyābhraka, rasāyanas, disorders brought about by impure abhraka and their treatment (324–376); the varieties of haritāla, its purification and killing (377–386); the killing of manaḥśilā and malla (387); the killing of godanta(haritāla) (308); the preparation of gandhaka-, malla-, manaḥśilā- and haritā-

lataila (389–405); the description of śarīkha, śambūka, muktāśukti, jalaśukti, kapardī and vidrūma, together with their medicinal properties (406–422); the preparation of kācabhasman and kācasuvarṇabhasman (425–429); the purification of ṭaṅkaṇa, kāṅkṣī, viṣa, gairika, jaipāla, and bhallātaka (430–441); the purification and killing of the gems (ratna) (442–444).

Chapter six (cikitsāprakarāṇa; 166 verses) consists of a collection of rasayogas against a series of diseases which are more or less arranged in agreement with the *Mādhavanidāna*. Most of these formulae, or even all of them, are not borrowed from earlier treatises, but were composed by the author.

Apart from Caraka (5.241–245), Suśruta (5.236–240) and Vāgbhaṭa (5.248), sources are not indicated. The author refers to the views of the vedāntināḥ, śaktivā-dināḥ (4.63) and Jainas (4.65, 139–140); he also mentions an opinion held by a yūnānavaidya (5.65–67).

The *Rasāyanasāra* is quoted in the *Āyurvedīya Khanijavijñāna*, Gulrājśarmami-śra's commentary on the *Āyurvedaprakāśa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*; it is one of the sources of the *Bheṣajasaṃhitā*, Hariśaraṇa-nanda's *Kūpīpakvarasānirmāṇavijñāna*, the *Rasadhātuprakāśa*, the *Rasayogasāgara* and the *Rasendrasambhava*.

Śyāma and Śyāmasundarācārya are quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The verses of the *Rasāyanasāra* were composed by the author himself.¹⁴⁵ The contents are based on his own experience.¹⁴⁶ Opinions of earlier authorities are repeatedly referred to,¹⁴⁷ occasionally followed by the author's own view.¹⁴⁸ Vāgbhaṭa's rules about the application of an añjana¹⁴⁹ are rejected by Śyāmasundara, who prefers Caraka's exposition on this subject.¹⁵⁰

The apparatus called bhrāṣṭrī (a furnace) is not described in other treatises; Śyāmasundara distinguishes five types: vālukāyantrabhrāṣṭrī, kvāthakarī bhrāṣṭrī, śodhanārthabhrāṣṭrī, tālādibhasmakarī bhrāṣṭrī, and sarvārthakarī bhrāṣṭrī (2.29–61).

Some technical terms explained in chapter three are: nāndī (3.2–5),¹⁵¹ mṛtputa (3.11),¹⁵² and saṃputa (3.12).¹⁵³ Types of mudrā¹⁵⁴ described are: vajra-, draṇḍha-, madhyama-, sādharmaṇa-, and sikatāsītāmudrā (3.14–21). Unusual names of yantras are: khalvacūrṇādiyantra, used for the preparation of haritālabhasman (3.27–30), vālukāgarbhapātālayāntra, used for preparing oils (3.31–34), talapātāyantra, also used for preparing oils (3.35–36), nalikāḍamarūyantra, used for the preparation of svarṇasindūra (3.43–44), ūṣmayāntra, used for preparing oils (3.45–46), and svarasayantra, used for preparing a svarasa (3.47–49). Types of saṃdāṇṣa (a pair of tongs) described are: yantrotthāpana-, ākarṣaka-, and saṃputasāṃdāṇṣa (3.77–79). A special type of ladle is the agnyākaraṣakadarvī (3.80).

A khaṭvāṅgayāntra is repeatedly mentioned (4.20 and 47; 5.42, 141, 255).¹⁵⁵ The pīṭharayantra, described in chapter five (5.116–133), and used for the purification of tin, lead and zinc, is not known (under this name) from other treatises.

The alloy vṛta is a mixture of kāṇṣya, iron and pittaḷa; the alloy vartaka is com-

posed of pittala, kāmśya, tin, lead and iron (5.228). Kāmśya and pittala are regarded as belonging to the upadhātus (5.222).

Some uncommon terms often employed in the *Rasāyanasāra* are cakrī (a bolus; 5.152, 156, 196, 306; 6.95) and śīṣī (a small bottle 4.290; 5.164).

Noteworthy items of Śyāmasundara's materia medica are barburā (4.258), barburīkā (5.267), grāhamada (5.23), ¹⁵⁶ and iṣagdola (6.107). ¹⁵⁷

*The author*¹⁵⁸

Śyāmasundara, son of Nandakiśora, a Mārwarī Agravāla vaiśya, was born in Kāmavana in Bharatpur in 1871 or 1872. His teachers were Paṇḍit Arjunamiśra, Rāmamiśra Śāstrī and Umācaraṇa Kavirāja. In the year 1918 he moved to Vārāṇasī in order to teach rasāyanasāstra at the Banaras Hindu University. He died in 1918 according to P.V. Sharma.¹⁵⁹

Apart from the *Rasāyanasāra*, he wrote the *Anupānavidhi*.¹⁶⁰

Date

The *Rasāyanasāra* was composed in the first quarter of the twentieth century.

The Rasayogasāgara

The *Rasayogasāgara* by Hariprapanna Śarman¹⁶¹ is an extensive collection of rasayogas, compiled from a large number of sources. The work contains a total number of 3,878 formulae, alphabetically arranged: akārādi (447 formulae), kakārādi (559 formulae), cakārādi (323 formulae), takārādi (467 formulae), pakārādi (719 formulae), yakārādi (650 formulae), and śakārādi (713 formulae). This collection is supplemented by the Sanskrit versions of 115 rasas from works in Tamil, attributed to Agastya and Vyāsa, 36 rasas from sources in Telugu and other languages, and 97 additional rasayogas. The pariśiṣṭa section also contains descriptions of diseases occurring in the *Basavarājīya*, and both verses and prose concerning weights and measures (quoted from the *Suśrutasaṃhitā*, *Śārṅgadharasaṃhitā*, *Kṛṣṇātreyasaṃhitā*, *Līlāvati*, *Vaijyantīkośa*, and *Manu*).

Printed sources of the *Rasayogasāgara* are: *Āgneyapurāṇa*, *Aṣṭāṅgahṛdaya*, *Aṣṭāṅgasamgraha*, *Āyurvedaprapakāśa* by Mādhava, *Āyurvedavijñāna* by Binod Lāl Sen, *Bhaiṣajyaratnāvalī* by Govindadāsa, *Bhelasamhitā*, *Bhāvaprakāśa*, *Brhadyogataraṅgiṇī*, *Brhatsamhitā*, *Cakradatta*, *Carakasamhitā*, *Cikitsākalikā* by Tīsaṭa, *Cikitsākrāmakaalpavallī* by Kāśīnātha, *Cikitsāsāra* by Gopāladāsa, *Dhanvantari* by Śālagrāma, *Gadanigraha*, *Hārītasamhitā*, *Hitopadeśa* by Śrīkaṇṭhasūri, *Kāmaratna*, *Narapatījaya*caryā by Narapati, *Nighaṇṭuratnākara*, *Pākāvalī*, *Rājāmārtanḍa* by Bhoja, *Rasacaṇḍāmsu* by Dattātreyā, *Rasacintāmaṇi* by Anantadeva, *Rasahrdaya*, *Rasamañjarī* by Śālinātha, *Rasaprakāśasudhākara*, *Rasarājasundara* by Dattarāma, *Rasaratnākara* by Nityanātha, *Rasaratnasamuccaya* by Vāgbhaṭa, *Rasārṇava*, *Rasasaṃketakalikā*, *Rasasāra* by Govindācārya, *Rasatarāṅgiṇī* by Sadānanda, *Rasāyanakhaṇḍa* by Nityanātha, *Rasāyanasāra* by Śyāmasundarācārya, *Rasendracintāmaṇi* by Dhunḍhukanātha, *Rasendrasārasamgraha* by Gopālakṛṣṇa, *Śārṅgadharasaṃhitā*, *Siddhabheṣajamaṇimā-*

lā, *Suśrutasaṃhitā*, *Trīṣaṭī* by Śārngadhara, *Vaidyājīvana* by Lolimbarāja, *Vaidyakaḷpadruma* by Raghunāthaprasāda, *Vaidyāmṛta* by Moreśvara, *Vaidyarahasya* by Vidyāpati, *Vaṅgasena*, *Vṛndamādhava*, *Yogacintāmaṇi* by Harṣakīrti, and *Yogaratanākara*.

Manuscript sources are: *Bāhaṭa* by Gaurīputrakārttikeya, *Basavarājīya*, *Bhaiṣajya-sārāmr̥tasamhitā* by Upendra, *Cikitsārahasya* by Hāritamuni, *Cikitsāratnābharāṇa* by Sadānandadādhīca, *Lohapaddhati* by Sureśvara, *Nārāyaṇavilāsa* by Nārāyaṇabhūpati, *Nūtanakalpa*, *Pāradayogaśāstra* by Śivarāmayogīndra, *Rasabodhacandrodaya*, *Rasadīpikā* by Anandānubhava, *Rasajñāna* by Jñānājyotiś, *Rasakaḷpalatāḍy* by Magnirāma, *Rasakāmadhenu* by Cūḍāmaṇi, *Rasakanikālīya* by Kaṅkālayogin, *Rasakaumudī* by Jñānācandra, *Rasakaumudī* by Śaktivallabha, *Rasakinnara*, *Rasālaṃkāra* by Bhaṭṭarāmeśvara, *Rasamuktāvalī*, *Rasapaddhati* by Bindu, *Rasapārījāta*, *Rasapradīpa* by Prāṇanātha, *Rasarājalaṅkārī* by Viṣṇupaṇḍita, *Rasarājaśaṃkara* by Rāmākṣṇa, *Rasarājaśīromaṇi* by Paraśurāma, *Rasaratnadīpikā* by Rāmarāja, *Rasaratnakaumudī*, *Rasaratnamaṇimālā* by Bābābhāī Vaidya, *Rasasāgara* by Kṣemāditya, *Rasasaṃgrahasiddhānta* by Govindarāma, *Rasasārasaṃgraha*, *Rasāvatāra* (anonymous), *Rasāvatāra* by Māṇikyacandra, *Rasāyanaparīkṣā*, *Rasāyanasaṃgraha* by Kṛṣṇaśāstrī Bhāṭavaḍekar, *Rasendracūḍāmaṇi* by Somadeva, *Rasendrakalpadruma* by Rāmākṣṇabhāṭṭa, *Rasendramaṅgala* by Nāgārjuna, *Rasendraratnakoṣa* by Deveśvara Upādhyāya, *Ratnākaraśaḍhayoga*, *Strīvilāsa* by Deveśvara Upādhyāya, *Sūtapradīpikā*, *Ṭoḍarānanda*, *Vaidyacintāmaṇi*, *Vaidyacintāmaṇi* (laghu), *Vaidyadarpaṇa* by Prāṇanātha, *Vaidyavilāsa* by Raghunāthapaṇḍita, *Yogacandrikā* by Lakṣmaṇa, *Yogamahārṇava* by Rāmanātha, *Yogasaṃgraha*, and *Yogasamuccaya* by Vyāsaṇapāti.

The *Rasayogasāgara* is quoted in the *Āyurvedīya Khanijavijñāna*; it is one of the sources of the *Rasendrasambhava*.

Some of the rasayogas collected in the *Rasayogasāgara* have been studied.¹⁶²

The author

The author does not give any information on his genealogy, place of residence, etc., in the introductory verses and the verses at the end of volume I. He lived in Bombay as an Ayurvedic practitioner and also wrote a work in Sanskrit called *Klomayathātathya*.¹⁶³

Date

The *Rasayogasāgara* was compiled in the years preceding its publication.

The *Rasayogaśataka*

The *Rasayogaśataka* by Pradyumna Śarmā Nilāṅgekar¹⁶⁴ is a small treatise in 254 verses, which consists of a collection of about 125 prescriptions against a series of diseases which are arranged in agreement with the *Mādhavanidāna*.

The work is a Sanskrit version of the *Vaidyasmṛti*, written in Marāṭhī by the author's father, Govinda Śarmā.¹⁶⁵ The verses are composed in a variety of metres. Most of the formulae are of a simple type.

In spite of the title and the author's praise of rasaśāstra in his Nivedana, the

Rasayogaśataka does not only contain rasayogas, but also about thirty prescriptions of an āyurvedic type without ingredients characteristic of iatrochemistry.

The author enlarged upon the work of his father by adding a series of rasāyana and vājīkaraṇa formulae, some prescriptions against women's diseases, some verses on bhasmaparīkṣā (228–231) and rasaśodhana (232–236), and, finally, some contraceptive prescriptions (246–249).¹⁶⁶

Some formulae derive from earlier authorities (pūrvācārya), one formula (220–221) is attributed to Somanātha, but, in general, sources are not referred to.

The author belonged to a family of vaidyas and was a practising physician in Hyderabad.¹⁶⁷ He was a son of Gaṅgā and Govinda, and a grandson of Lakṣmī and Varadarāja.¹⁶⁸

The *Rasendracintāmaṇi*

The *Rasendracintāmaṇi*, ascribed to Dhunḍhukanātha or to Rāmacandra Guha,¹⁶⁹ is a treatise on alchemy and iatrochemistry. Its structure resembles that of the *Rasendrasa-rasamgraha*, but, in contrast with the latter work, it also deals with deha- and lohavedha.

Contents¹⁷⁰

Chapter one (śāstrāvātāra; 1–6) is of an introductory nature; it contains a eulogy of mercury and its products, which enable a human being to obtain an indestructable (ajārā-mara) body, khecaratva and śivatva (4). Six types of benefit result from the darśana, sparśana, bhakṣaṇa, smaraṇa, pūjana and dāna of mercury (4–5). Mercury, when free from blemishes, is like Brahmā; it is like Janārdana when mūrchita, like Rudra when mārita, like Sadāśiva when baddha (5).

Chapter two (mūrchanādhyaḥya; 6–10) describes gandhakajāraṇa, two sikatā-yantras, the preparation of kajjalī and niḡaḍa. Chapter three (bandhanādhyaḥya; 10–23) enumerates nineteen saṃskāras: svedana, mardana, mūrchana, utthāpana, pātana, bodhana, niyamana, dīpana, anuvāsana, gaganādigrāsapramāṇa, cāraṇa, garbhadruti, bāhyadruti, yogaḥjāraṇa, rañjana, sārāṇa, krāmāṇa, vedhana, and bhakṣaṇa (10). Saṃskāras described in the chapter are mardana, mūrchana, utthāpana (10–11), svedana (12), ūrdhva-, adhaḥ-, and tiryakpātana (12–13), bodhana (13–14), niyamana (14), dīpana (14), anuvāsana (14–15), grāsana (15–16), cāraṇa (16–18), jāraṇa (18–21), and druti (21–23). Chapter three also gives an account of the taptakhalla and dolāyantra (18). Chapter four (putapākādhyaḥya; 23–36) continues the description of the saṃskāras: rañjana (23–24), sārāṇa and the gandharvataila used for this purpose (24–28),¹⁷¹ krāmāṇa (29), vedhana, kṣetrikaraṇa, and bhakṣaṇa (29–36).

Chapter five (abhrīya; 36–41) is concerned with the mica (abhraka), its sattva (37), druti (38–39), māraṇa (39), amṛtikaraṇa (39–40), sattvapātana, and sattvadruti (40–41). Chapter six (sarvagandhakādhyaḥya; 41–43) is about sulphur (gandhaka), its purification (41–43), and the preparation of gandhataila (43).

Chapter seven (sarvalauhādhyaḥya; 44–52) is concerned with the purification and killing of the seven metals (loha; dhātu): gold, silver, copper, iron, lead, tin, rītikā or rājāriti (brass), and kāmṣya (bronze). Chapter eight (viśopaviśasādhana; 52–65) deals

with the viṣas and upaviṣas (52–57), vajra and vaikrānta (57–58), tālaka, tuttha, bhūnāga, manāṣīlā, kharpara, vimala, mākṣīka, kāśīśa, kāntapāṣāṇa, varāṭikā, hīṅgula, maṇḍūra (58–64), and the nine gems (ratna; 64–65).

Chapter nine (prayogīya; 66–195) is about the medicinal uses of mercurial and other metallic preparations. The first part of this long chapter (66–96) is called rasāyanādhikāra and contains, as indicated by this name, rasāyana formulae and prescriptions. The second part is devoted to rasayogas against diseases which are arranged in conformity with the *Mādhavanidāna*.

The *Rasendracintāmaṇi*, chiefly written in verse, is accompanied by passages in prose which repeatedly give the impression of being an auto-commentary or a collection of glosses.¹⁷²

The work itself is based on earlier treatises,¹⁷³ the teachings of the author's guru, and, in particular, his personal experience.¹⁷⁴

Authorities and works mentioned in chapters one to eight are: *Bhuṣuṇḍopākhyāna* (3),¹⁷⁵ Govinda (21),¹⁷⁶ Nāgārjuna (13),¹⁷⁷ Nityanātha (22), *Rasaḥṛdaya* (25), *Rasārṇava* (3; 6), *Siddhilakṣmīśvara* (44),¹⁷⁸ *tantrāntara* (17), and Vaśiṣṭha (3).¹⁷⁹

Schools of interpretation are alluded to (69).¹⁸⁰

Chapter nine mentions many divine and other authorities to whom formulae are attributed.¹⁸¹

Numerous rasayogas of chapter nine are also found in the *Rasendrasārasaṃgraha*.¹⁸²

The *Rasendracintāmaṇi* is quoted or referred to in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedavijñāna*, *Āyurvedīya Khanijavijñāna*, *Bhāvaprakāśa*, *Bheṣajasaṃhitā*, *Bṛhadrasarājasundara*, *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa*, *Harīśaraṇānanda's Kūpiṇak varasanirmānavijñāna*, the *Pāradasaṃhitā*, *Rasajalanidhi*,¹⁸³ *Rasakāmadhenu*, *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasāyanasaṃgraha*, *Rasayogasāgara*, *Rasoddhātatantra*, *Somadevaśarma's* commentary on the *Āyurvedaprakāśa*, *Trimalla's Yogarataraṅgiṇī* and *Bṛhadhyogatarāṅgiṇī*, *Vaidyārāja's Sukhabodha*, and the *Yogarātnākara*.

Mādhava's *Āyurvedaprakāśa* quotes numerous verses from the *Rasendracintāmaṇi*.¹⁸⁴

Dhūṇḍhukanātha is quoted in *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa* and *Hazārīlāl Sukul's* commentary on the *Rasaratnasamuccaya*.

A commentary (ṭīkā) on the *Rasendracintāmaṇi* by Maṇirāma is quoted in *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa*. A short commentary by Ramānātha Gaṇaka is recorded,¹⁸⁵

Special features

Eighteen poisonous substances are distinguished;¹⁸⁶ eight of these, śaktuka, mustaka, kaurma, darvika, sārṣapa, saikata, vatsanābhaka¹⁸⁷ and śṛṅgī,¹⁸⁸ may be used for medical purposes and rasāyana; the other ten, suitable for rasāyana, dhātuvāda and viṣavāda purposes, are: kālākūṭa, meṣaśṛṅgī, dardūra, halāhala, karkoṭa, granthi, hāridra, raktaśṛṅgī, keśara, and yamaḍaṃṣṭrā (52–54). Poisonous substances are also divided into four

classes: brāhmaṇa, kṣatriya, vaiśya and śūdra, identifiable by their colours; white, red, yellow and black. Eight stages (vega) of intoxication are enumerated, characterized respectively by praśama, vepathu, dāha, patana, phena, vikalatā, jaḍatā, and maraṇa. A second classification, recognized by some authorities, distinguishes nine major (viṣa) and seven minor (upaviṣa) poisons; the nine major poisons are: kālākūṭa, vatsanābha, śṛṅgaka, pradīpana, halāhala, brahmaputra, hāridra, śaktuka, and saurāṣṭrika; the seven minor poisons are: arka, schuṇḍa, dhustūra, lāṅgalī, karavīraka, guñjā, and ahiphena (56–57).

Some remarkable names of disorders in the formulae are: agramāṃsa (176),¹⁸⁹ bāhukampa (trembling of the arms; 149), jaṅghākampa (trembling of the legs; 149), lūtā (121; 192), and śukrapravāha (spermatorrhoea; 127).

The author

The *Rasendracintāmaṇi* is ascribed to Ḍhuṇḍukanātha¹⁹⁰ and to Rāmacandra of the Guha family.¹⁹¹ The improbable view that Ḍhuṇḍukanātha is a corruption of Ḍaṇḍakanātha, i.e., Rāma, the son of Daśaratha,¹⁹² which would make the author identical with the hero of the *Rāmāyaṇa*,¹⁹³ was already rejected by Girīndranāth Mukhopādhyāya.¹⁹⁴ Some scholars assume that both Ḍhuṇḍukanātha and Rāmacandra Guha wrote a treatise called *Rasendracintāmaṇi*.¹⁹⁵

Ḍhuṇḍukanātha was a pupil of Kālanātha.¹⁹⁶

Rāmacandra is sometimes credited with the *Rasapārijāta*,¹⁹⁷ a *Rasapradīpa*,¹⁹⁸ and a *Cakradattānāmāgrantha*.¹⁹⁹ G. Hāldār²⁰⁰ ascribes a *Rasaratnākara* to him. He is also identified with the author of the *Rādhāvinodakāvya*.²⁰¹

Date

The *Rasendracintāmaṇi* is posterior to the *Rasārṇava* and *Rasaḥṛdaya*, works quoted in it; it is also later than the *Rasaratnākara*, whose author, Nityanātha, is mentioned. The terminus ante quem is provided by the *Bhāvaprakāśa* and *Rasakāmadhenu* which refer to it. This evidence implies that the *Rasendracintāmaṇi* was written between the middle of the fifteenth century and the second half of the sixteenth century.²⁰²

The Rasendracūḍāmaṇi

The *Rasendracūḍāmaṇi* by Somadeva²⁰³ is an important, systematically arranged, treatise on alchemy and iatrochemistry.

*Contents*²⁰⁴

The work consists of 1,398 verses, arranged in sixteen chapters (adhyāya).

Chapter one²⁰⁵ (rasamahiman; 52 verses) contains maṅgalas addressed to Śiva and Rāma (1–2), a verse in praise of Raseśvara (3), a description of Rasamahābhairava (4), a verse praising Rasāṅkuṣī (5), verses in homage of the Kaulikas²⁰⁶ and their lord (īśvara), Kaulika, i.e., Maheśvara (6–12),²⁰⁷ and a description of the despised pākhaṇḍakaulika, who is a nāstika and vedanindaka (13); it deals with the mukti that can be reached by those adhering to the kaulika tradition, but not by the pākhaṇḍas (heretics)

(14–17), and with the importance of the body (18–24); the remaining part of the chapter is devoted to a eulogy of mercury and allied subjects.

Chapter two (śiṣyopānayanādi; 63 verses) begins with some verses giving information on the author and the purport of the chapter, which is called sūtrasthāna here (1–3). Subjects dealt with are: the initiation of a pupil (śiṣyopānayana; 4–8), the characteristics of the teacher and the sādḥaka (9–12), the jārāṇa of mercury (14–22), the four faculties called śakti (23–24), the pūjā of Maheśvara and his attendants (25–29), and the pūjā of Rasabhairava and Rasāṅkuśa (30–57); the chapter ends with some verses on rasaśāstra.

Chapter three (rasaśālānirūpaṇa; 35 verses) describes the laboratory (rasaśālā) and its inventory (1–20ab), some implements (20cd–23), and the persons who are qualified to take part in alchemical operations (24–35).

Chapter four (paribhāṣā; 117 verses) gives definitions (paribhāṣa) of a large number of technical terms, and one formula, called siddhacapalarasa (58cd–71).

Chapter five (164 verses) contains descriptions of thirty yantras (3–94), sixteen types of mūṣā (103–126), four types of koṣṭhī (128–143), and ten types of puṭa (148–161);²⁰⁸ subsidiary subjects are jālamṛd (57cd–58),²⁰⁹ vahnimṛtsnā (5.59–61),²¹⁰ the mūṣā in general (95–98), sandhilepana (99),²¹¹ the clay (mṛttikā) and other substances used for the mūṣā (100–102), the vaṇṇanāla (141–142ab),²¹² puṭa in general (144–147), types of puṭa left undescribed (162), and the synonyms of upala (cow dung used as fuel; 163).

Chapter six (72 verses) opens with verses characterizing a divine herb (divyauṣadhi), enumerating four categories of alchemically important drugs of vegetable origin (rasauṣadhi, mahaṣadhi, siddhaṣadhi, divyauṣadhi), and listing the six types of divyauṣadhi: vṛkṣa, vallī, latā, gulma, tṛṇa, and kanda (1–5). The main part (6–71) is devoted to a description of the sixty-four divyauṣadhis, which are particularly suitable to achieve the bandha of mercury.

Chapter seven (eleven verses) contains a list of the names of the sixty-eight rasauṣadhis, which are not described by Somadeva. These plants are said to grow in the Vinḍhyas and in the Himālaya and on the mountains called Malaya, Gomantaka,²¹³ Śrīgiri,²¹⁴ Sahya,²¹⁵ Pāriyātraka,²¹⁶ Kiṣkindha,²¹⁷ Māhendra,²¹⁸ and Mālyavanta.²¹⁹

Chapter eight (48 verses) enumerates forty-six plants, forming the śarpākṣyādigāṇa, which are especially useful in the niyamana of mercury, for which reason they are called niyāṁikāḥ (1–8ab), eighty-four plants, useful in making rasabhasman, which form the vyāghrikādigāṇa (9cd–20), forty plants, forming the raktasnuhyādigāṇa, employed in the killing and bandha of mercury (21–28), eight plants, forming the kadalyādigāṇa, which promote the liquefaction (drāvaṇa) of metals, rasas, etc. (29–30), and eighteen plants, constituting the kākamācyādigāṇa, which are employed in the saṁskāra called krāmaṇa (31–33); four particularly powerful herbs are separately described: ekavirā, mahāvīrā, prayoga,²²⁰ and hemadaṇḍikā or hemavallī (34–41); the thirteen (organic and inorganic) drugs of the vajraṇḍādivarga are useful in rasāyana preparations (42–44), the eight plants of the bhūpātalyādivarga promote the bandha of mercury (45–46ab), and the five plants of the pañcaratnakagaṇa are suitable to achieve deha- and lohasiddhi (46cd–47).

Chapter nine (paribhāṣāprakaraṇa; 31 verses) describes groups of substances and their properties: madhuratraya (1ab), mūtravarga (1cd–2ab), pañcamṛttikā (2cd–3ab), kṣāratraya (3cd), kṣāravarga (4–6ab), amlavarga (6cd–8), lavaṇavarga (9–10), viṣavarga (11–12), upaviṣavarga (13–14ab), tailavarga (15–16ab), dugdhavarga (16cd–18ab), pittavarga (18cd–19), vasāvarga (20), viḍvarga (21–22ab), raktavarga (22cd–23), pītavarga (24), śvetavarga (25), kṣṇavarga (26), śodhanīyagaṇa (28), lohakāṭhinyanāśanayoga (29), and drāvaṇagana (30).

Chapter ten (147 verses) deals with the eight mahārasas: ghana (= abhraka), rājavarta, vaikrānta, sasya, vimala, adrijāta (= śilājatu), tuttha and tāpya (= mākṣika) (1).

Its subjects are: abhraka (mica), its four varieties, its purification and killing, the extraction of its essence, the purification, softening and killing of this essence (2–54); the purification and killing of rājāvarta, followed by the extraction of its essence (55–60); the purification, killing, the extraction of the essence, etc., of vaikrānta (61–71ab), sasyaka (71cd–84),²²¹ vimala (85–94), śilājatu (95–110ab), rasaka (110cd–128),²²² and mākṣika (129–147).

Chapter eleven (114 verses) gives an account of the eight uparasas and the eight sādharmaṇarasas.

The eight uparasas are:²²³ gandhāśman (= gandhaka), tāla (= haritāla), tuvarī, kunaṭī (= manaḥśilā), suvīra (= sauvīrāñjana), kaikuṣṭha, khacara (= kāsīsa), and gairika (1).

The subjects of the first part of the chapter are: sulphur (gandhaka), its four varieties, its properties, a story explaining why sulphur is also called balivasā,²²⁴ the purification and liquefaction (druti) of sulphur, uses of sulphur and its products (2–31); the varieties, properties, purification, etc., of haritāla (32–48), tuvarī (49–53), manaḥśilā (54–61), añjana (62–68), kaikuṣṭha²²⁵ (69–77), kāsīsa (78–84), and gairika (85–89).

The second part of the chapter is concerned with the eight sādharmaṇarasas: kampilla,²²⁶ gaurīpāśāṇa,²²⁷ navasāraka,²²⁸ kaparda,²²⁹ vahnijāra (= agnijāra),²³⁰ girisindūra,²³¹ hiṅgula, and boddāraśṛṅga²³² (90–91). Somadeva describes these substances and their properties; he adds verses on the purification of varāṭikā (= kaparda) and hiṅgula (cinnabar), a verse on the purification of sādharmaṇarasas in general, and a verse on mixing of the purified essences of uparasas and sādharmaṇarasas; agnijāra, however, need not be purified²³³ (92–114).

Chapter twelve (68 verses) deals with the nine gems (ratna): māṇikya (ruby), muktāphala (pearl), vidruma (coral), tārksya (emerald), puṣpa (topaz), bhidura (diamond), nīla (sapphire), gomedaka (zircon), and vidūraka (cat's eye). The varieties, characteristics, blemishes and properties of these gems are described.

The ruby is of two varieties (padmarāga and nīlagandhi); the number of its blemishes is eight (14–16). The pearl (8–10) has nine characteristics. The emerald has seven characteristics and a large number of blemishes (14–16). The topaz presents eight good and nine bad characteristics (17–19). Diamonds are classified as male, female and napuṃsaka, or, according to their colour, as brāhmaṇa, kṣatriya, vaiśya and śūdra (20–25); the five blemishes that may be found in all gems are listed (27–28),²³⁴ subjects added are the purification and killing of diamonds, the use of their bhasman, and a rasāyana formula (29–43). Two varieties of sapphire are distinguished: jālanīla

and indranīla (44–47). The zircon has eight good and seven bad characteristics (48–50). Cat's eyes have six good and six bad characteristics (51–52). The general methods of purifying and killing gems are described (54–56), followed by a procedure to liquefy (druti) them (57–65). The chapter ends with the advantages of wearing gems (66).

Chapter thirteen (78 verses) lists the following nine metals: (1) śuddhaloha: kanaka (gold), rajata (silver), bhānu (copper) and aśmaśāra (iron), (2) pūtiloha: nāga (lead) and tin (vaṇga), (3) miśraloha (alloys): pittala, kāmśya and varta (1). The terms dhātu and loha are used to denote metals.

Gold²³⁵ is of five varieties; its purification and killing are described, followed by the properties and uses of its bhasman (2–25). Silver (26–39)²³⁶ and copper (40–76)²³⁷ are similarly described. The usual three types of iron²³⁸ are distinguished: muṇḍa (cast iron), tīkṣṇa, and kānta (steel). Muṇḍa is of three varieties, the last of which is called kaḍāraka; the varieties of tīkṣṇa are khara, sāra, honnāla, tārāpaṭṭa and kālaloha, those of kānta are romaka, bhrāmaka, cumbaka and drāvaka (77–95). Somadeva gives an account of the purification of iron and its killing, the uses of iron and its bhasman, and the disorders caused by impurities (96–130); half a verse only is devoted to maṇḍūra (127cd).²³⁹ Tin,²⁴⁰ its varieties, properties, purification and killing are dealt with, followed by a rasāyana formula (131–145). The verses on lead²⁴¹ describe its characteristics and properties, its purification, its killing by means of a special apparatus, called bhrāṣṭrayantra, and a rasāyana formula (146–161). Two varieties of pittala (brass)²⁴² are described, rīti(kā) and kākatuṇḍī,²⁴³ of which rīti is superior in quality; the purification, killing and liquefaction of rīti are dealt with, followed by a rasāyana formula (162–173). Kāmśya (bronze)²⁴⁴ is said to be made from eight parts of copper and two parts of tin; its characteristics, properties, purification and killing are described (174–179). Varta(loha) or pañcaloha²⁴⁵ is an alloy of kāmśya (bronze), arka (copper), rīti (brass), loha (iron) and ahijāta (lead);²⁴⁶ its purification and killing are dealt with (180–184ab).

The chapter proceeds with the preparation of bhūnāgasattva (186–197) and the properties of a finger ring (ūrmikā) of this material (198). The chapter ends with the preparation of añkolatāila, its properties and its uses (199–229).

Chapter fifteen (72 verses) is concerned with the praise of mercury (2–3), its origin (4–13ab), the way of procuring it (13–15),²⁴⁷ the etymology (nirukti) of its names (16–20), the five doṣas (mala, viṣa, vahni, mada, darpa) and seven kañcukas (bhū-, śaila-, jala-, tāmbra-, ayaḥ-, nāga-, and vaṇgasamudbhava) of mercury (21–27); a list of the eighteen saṃskāras and the opinions of a series of authorities on the purification of mercury (28–35); descriptions of the saṃskāras called svedana, mardana, murchana (36–39), ways to remove the doṣas and kañcukas (40–49), the saṃskāra called rodhana (52–53), mukhakarāṇa (54), svedana again (55–56), saṃnyāsa (57–58), dīpana (59–61), the rākṣasavaktra of mercury (62–64), and some connected subjects (65–72).

Chapter sixteen (98 verses) is about the jārāṇā of abhṛaka (mica) and some other substances. The jārāṇā of abhṛakasattva, resulting in pakṣaccheda of mercury, is the main subject (1–85);²⁴⁸ eight grāsas (doses of abhṛaka added to mercury) are described; additional subjects are biḍa (32), the form of mercury called daṇḍadhārin

(33–34), and chinnapakṣa mercury (44 and 75). The chapter ends with the jāraṇa of copper, iron and gold (86–98).

Somadeva frequently mentions his own name in his treatise;²⁴⁹ he also refers to particular chapters of his book (14.60; 15.57).

Several earlier authorities and other persons are referred to: Bhairava (6.3; 12.25 and 28),²⁵⁰ Bhāluki (15.33 and 54),²⁵¹ Bhāskara (15.32),²⁵² Brahmajyotis (5.61),²⁵³ Devastinu (14.199),²⁵⁴ Dineśvara (15.33),²⁵⁵ Girīśa (14.114),²⁵⁶ Govinda (15.34),²⁵⁷ Kharapaṇa (4.58ab),²⁵⁸ Manthānabhairava (1.44; 6.1),²⁵⁹ Mrgacārīn (4.96),²⁶⁰ Nāgārjuna (5.61; 11.91),²⁶¹ Nandikeśvara (14.58), Nandin (1.35; 5.56, 61, 77, 138; 14.128; 15.29, 35, 66),²⁶² Śambhu (8.27),²⁶³ Śiva (14.58), Somanātha (14.70),²⁶⁴ Śrīkaṇṭha (7.1),²⁶⁵ and Svachhandabhairava (4.52).²⁶⁶

A number of verses of the *Rasendracūḍāmaṇi* are also found in the *Rasārṇava*.²⁶⁷

The *Rasendracūḍāmaṇi* is quoted in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, Narendranātha's *Capalanirṇaya*,²⁶⁸ Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasajalanidhi*,²⁶⁹ *Rasakāmadhenu*, *Rasamitra*, *Rasaratnākara*, *Rasaratnasamuccaya*,²⁷⁰ *Rasasinḍhu*, the commentary on the *Rasataraṅgiṇī*, the *Rasatattvavivecana*, *Rasayoga-sāgara*, *Ratnākaraṣadhayogagrantha*, *Rasendrasambhava*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. It was one of the sources of the *Āyurvedaprakāśa*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, the *Pāradasaṃhitā* and Yādvajī's *Rasāmṛta*.

The *Ānandakanda* contains many verses which are also found in the *Rasendracūḍāmaṇi*. The *Rasendracūḍāmaṇi* has at least two verses in common with the *Dhanvantārīyanighaṇṭu*.²⁷¹

Somadeva is cited in the commentaries by Āśubodha and Nityabodha Senagupta, Hazārīlāl Sukul, and Khare on the *Rasaratnasamuccaya*, in Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and in the *Rasaprakāśasudhākara*.

The *Rasaratnasamuccaya* mentions Somadeva as one of the *Rasasiddhas*.

The *Rasendracūḍāmaṇi* is a *rasaśāstra* work that had much influence on later treatises. The *Rasaratnasamuccaya* reproduces a large number of its verses; the lists of *divyaūśadhis* and *rasaūśadhis* are, for example, also found in the *Rasaprakāśasudhākara*.

*Special features*²⁷²

Mercury is said to cure diseases arising from the three *doṣas* when combined with gold, pitta diseases when combined with silver, kapha and *vāta* diseases when combined with copper, the various kinds of *śūla* when combined with iron, blood diseases when combined with lead, and *meha* when combined with tin (1.34). A stray verse of chapter one describes the plant called *vṛścikālī* (1.48). Four *śaktis* are distinguished: *Mālīnī*, which gives *hemaśakti*, *Vajrīṇī*, giving longevity, *Kāntā*, giving *hema-* and *lohasiddhi*, and *Abhrā*, which gives *bandha* of mercury (2.23–24). The verses on the construction of a *maṇḍala*²⁷³ mention ten *Dūtīs* (female messengers), associated with Śiva, whose names are *Lepikā*, *Kṣepikā*, *Kṛāmaṇī*, *Raṇjikā*, *Lohaṭī*, *Bandhinī*, *Bhūcarā*, *Mṛtyunāśīnī*, *Vibhūti*, and *Khacarā* (2.28–29).

Some implements that should be available in an alchemical laboratory are: kaṭatrāṇī,²⁷⁴ kṣudrakṣipra, kṣurapra,²⁷⁵ pālikā, and karṇikā;²⁷⁶ three types of strainer (cālīnī) are described (3.6–20ab).

Technical terms explained in chapter four are: dhānavantarabhāga,²⁷⁷ rudrabhāga,²⁷⁸ kajjali,²⁷⁹ rasapaṅka,²⁸⁰ navaṇṭapīṣṭī,²⁸¹ piṣṭī,²⁸² pātanapiṣṭī,²⁸³ hema- and tārakṣṭī,²⁸⁴ varaloha,²⁸⁵ svarṇarakṭī,²⁸⁶ tāarakṭī,²⁸⁷ candra- and analadala,²⁸⁸ sita- and pītadala,²⁸⁹ lohanāga,²⁹⁰ śulbanāga,²⁹¹ piñjarī,²⁹² candrārka,²⁹³ nirvāpaṇa or nirvāhaṇa,²⁹⁴ vāritara,²⁹⁵ rekhāpūrṇa,²⁹⁶ apunarbhava,²⁹⁷ niruttha,²⁹⁸ bīja,²⁹⁹ tādana,³⁰⁰ dhānyābhakra,³⁰¹ sattva,³⁰² ekakoliśikha,³⁰³ śikhitra,³⁰⁴ hiṇḍulākṣṭa,³⁰⁵ ghoṣākṣṭa-tāmra,³⁰⁶ guhyānāga,³⁰⁷ varanāga,³⁰⁸ utthāpāna,³⁰⁹ dhālana,³¹⁰ capala,³¹¹ dhautā,³¹² dvandvana,³¹³ anuvārṇa,³¹⁴ bhañjīnī,³¹⁵ pataṅgi,³¹⁶ phalikā,³¹⁷ pataṅgīrāga,³¹⁸ āvāpa (also called pratīvāpa and ācchādāna),³¹⁹ nirvāpa or snapana,³²⁰ śuddhāvarta,³²¹ bījāvarta,³²² svāṅgaśīta,³²³ bahiḥśīta,³²⁴ svedana,³²⁵ mardana,³²⁶ murchana,³²⁷ naṣṭa-piṣṭa,³²⁸ utthāpāna,³²⁹ pātana,³³⁰ rodhana,³³¹ niyamana,³³² dīpana,³³³ grāsamāna,³³⁴ jāraṇa,³³⁵ cārāṇa,³³⁶ druti,³³⁷ biḍa,³³⁸ rañjana,³³⁹ sāraṇa,³⁴⁰ vedha,³⁴¹ udghātana,³⁴² svedana, and saṃnyāsa.³⁴³

The saṃskāra called krāmaṇa³⁴⁴ is not described in chapter four, but referred to as krāmaṇa in chapter eight (8.31–33) and as parikramavidhi in chapter fifteen (15.28). Some saṃskāras are, differently worded, dealt with again in chapter fifteen, while chapter sixteen is devoted to the saṃskāra called jāraṇa.

The yantras described in chapter five are: dolā-³⁴⁵ khalva-³⁴⁶ valabhī-³⁴⁷ ūrdhva-pātana-, adha-pātana-, tiryak-pātana-³⁴⁸ kacchapa-³⁴⁹ antarālīka-³⁵⁰ tāpikā-, pratigarbha-, garbha-³⁵¹ pālikā-³⁵² ghaṭa-³⁵³ iṣṭikā-³⁵⁴ vidyādhara-³⁵⁵ ḍamaruka-³⁵⁶ nābhi-³⁵⁷ grasta-³⁵⁸ tulā-³⁵⁹ sthālī-³⁶⁰ koṣṭhikā-³⁶¹ vālūkā-³⁶² lavaṇa-³⁶³ dhūpa-³⁶⁴ kuṇḍla- or svedana-³⁶⁵ dhekī-³⁶⁶ somānala-³⁶⁷ and nālikāyantra.³⁶⁸ Unusual yantras are those called grasta-, pratigarbha- and tāpikāyantra. A bhrāṣṭrayantra (14.149) and kandukayantra (14.229) are occasionally referred to by Somadeva.

The types of mūṣā (crucible) described by Somadeva are: vajramūṣā,³⁶⁹ yogamūṣā,³⁷⁰ vajradrāvaṇamūṣā,³⁷¹ gāramūṣā,³⁷² varamūṣā,³⁷³ varṇamūṣā,³⁷⁴ rūpyamūṣā,³⁷⁵ bīdamūṣā,³⁷⁶ vṛntākamūṣā,³⁷⁷ gostanīmūṣā,³⁷⁸ mallamūṣā,³⁷⁹ pakvamūṣā,³⁸⁰ golamūṣā,³⁸¹ mahāmūṣā,³⁸² mañjūsamūṣā,³⁸³ and muśālamūṣā.³⁸⁴

The types of koṣṭhī³⁸⁵ are: āṅgārakoṣṭhī,³⁸⁶ pātālakoṣṭhikā,³⁸⁷ gārakoṣṭhī,³⁸⁸ and tiryakpradhamakoṣṭhī.³⁸⁹ A prakāṭakoṣṭhī is once referred to (4.97).

The puṭas³⁹⁰ described are: mahāpuṭa,³⁹¹ gajapuṭa,³⁹² vārahapuṭa,³⁹³ kukkuṭapuṭa,³⁹⁴ kapotapuṭa,³⁹⁵ govarapuṭa,³⁹⁶ bhāṇḍapuṭa,³⁹⁷ vālūkapuṭa,³⁹⁸ bhūdharapuṭa,³⁹⁹ and lāvakaṭa.⁴⁰⁰

The descriptions of the sixty-four divyausadhis of chapter six are important and have influenced later authors. The group consists of: akṣīrā, aparṇā, atasīvallikā, bhṛṅgavallī, bhūtakeṣṭī, bhūtumbinī, bilvinī, bodhilatā, brāhmaṇī, camarikā, cāṇḍālī, chattrīṇī, citravallī, devadālī, gandharvī, gomārī, gonasā, gorocanalatā, goṣṅgī, īśvarī, kākinī, karasīvallikā, karavīralatā, karīrī, kṛṣṇalatā, kṣīravallī, kūrmalatā, kuṭajavallī, lambinī, laṣunavallī, mādhavī, madyagandhā, mahānāgī, mahauṣadhi, mahauṣadhī, mañḍūkalatikā, mraṅkṣaṇagandhinī, mūlakandā, munivallī, nāginī, nimbukīlatā, pattravallī, pītavallikā, raktāṅgī, raktavallī, rohiṇī, rudantikā, saptapattī, sarpiṇī,

somakalā, somavallī, somavṛkṣa, sthalapadmiṇī, tāmra Vallikā, tilakandā, tridaṇḍī, triśūlī, uccaṭā, udumbaralatā, vajravallī, vārāhī, vijayā, viśālā, and vyāghrapādī.⁴⁰¹

The sixty-eight *rasauśadhis* of chapter seven, listed without being characterized, are: *ajamārī*, *alambuṣā*, *aparājītā*, *ardhacandrā*, *bhārṅgī*, *bhṛṅgī*, *brhatī*, *candrodakā*, *ciñcī*, *citrapādī*, *dhanvayāsaka*, *durgandhā*, *garuḍī*, *gojihvā*, *guḍūcī*, *halinī*, *haṃsapādikā*, *hemapuṣpī*, *hīrṇī*, *īśvarī*, *jalakumbhī*, *jalamūlakā*, *jalāpāmārga*, *jalapippalī*, *jālinī*, *jaloṭpala*, *kākamācī*, *karmasphoṭī*, *kāśmarī*, *kukkūṭī*, *mālārjuna*, *māṃśī*, *māṇḍūkī*, *meghanādī*, *mohinī*, *mūrvā*, *muśālī*, *nandinī*, *pāgava*, *pāśāṇī*, *pāṭalā*, *paṭolī*, *potakī*, *rasā*, *sadacitrikā*, *samaṅgā*, *sārivā*, *sarpākṣī*, *śaṭī*, *śikhipādī*, *śīśikā*, *sitaganḍhinī*, *sthalaprasārīṇī*, *śukanāsikā*, *tiktakā*, *tulasī*, *tuṣāmbu*, *uttamā*, *vajrakandikā*, *vanakūṣmāṇḍavallī*, *vanamālā*, *vārāhī*, *vāsā*, *veṇukā*, *vidārī*, *viṣā*, *viṣaghṇī*, and *vṛścikālī*.

The forty-six plants belonging to the *sarpākṣyādigaṇa* are: *ākhukarṇikā*, *āmalakī*, *anantā*, *bhṛṅgarāja*, *brahmaḍaṇḍikā*, *dviparṇī*, *ekaparṇī*, *gojihvā*, *jalabimbī*, *jambukī*, *jvālīnī*, *kākamācī*, *kapotī*, *kokilākṣa*, *kṣīrīṇī*, *kukkuṭajāṅghā*, *kuraṅginī*, *kuraṇṭaka*, *mahābalā*, *maṇḍūkaparṇikā*, *matsyākṣī*, *meghanāda*, *meṣaśṛṅgī*, *mūrvā*, *nāgabala*, *nīlī*, *padmacārīṇī*, *pāṭhā*, *phaṇī*, *prapunnāṭa*, *punarnavā*, *rāsnā*, *sahadevī*, *samaṅgā*, *śarapunkhā*, *sarpākṣī*, *śatāvarī*, *śikhaṇḍinī*, *śvetādriparṇikā*, *śyāmaparṇikā*, *tittī*, *triparṇī*, *tripatrā*, *tulasī*, *vandhyakarkoṭī*, and *viṣṇukrāntā* (8.1–8ab).⁴⁰²

The eighty-four plants of the *vyāghrikādigaṇa* are: *ajamārīkā*, *aṅganāyaki*, *arkapuṣpikā*, *bākucī*, *bhūṣuṇḍī*, *brahmarājī*, *brhatī*, *cakrikā*, *cāṇḍālī*, *danṭikā*, *devadālī*, *ekavīrā*, *gajakarṇikā*, *gojihvā*, *haṃsapādikā*, *hanūmantī*, *hemalī*, *hīlamocaka*, *jagatī*, *kākajāṅghā*, *kākatuṇḍī*, *kañcukī*, *kaṅguṇī*, *kaṅkatī*, *kāravallī*, *karkoṭī*, *kārpāsī*, *kāsamārī*, *kaṭutumbikā*, *keśinī*, *koṭarākṣī*, *kṛṣṇadhattūra*, *kṛṣṇākṣīva*, *kumārī*, *kumbhinī*, *lakṣmī*, *lāṅgalī*, *mahākālī*, *mālikā*, *māyūra*, *meghapuṣpī*, *meṣaśṛṅgī*, *nāgavallikā*, *nāginī*, *narajīvā*, *narakasā*, *padmacārīṇī*, *paṭolikā*, *putrajīvīkā*, *rākṣasī*, *raktacitrā*, *raktasnuhī*, *rasanirjivakārī*, *rudantī*, *śākhota*, *saktukā*, *saktuśṛṅgī*, *śambarā*, *śamī*, *śāṅkhapuṣpī*, *śaṭkārī*, *sitāṅkola*, *somavallārī*, *śṛgālajihvikā*, *sūryabhaktā*, *śvetaguṇjā*, *śvetārka*, *tuvaravallī*, *uccaṭā*, *vahni*, *vahnimardanī*, *vahnimārī*, *vajrīṇī*, *vanapṭiluka*, *viśālā*, *vṛkṣarāja*, *vyāghranakhī*, *vyāghrapādikā*, *vyāghrī*, *vyāghrikā*, *yajñavallikā*, and *yavaciñcā* (8.9cd–20).⁴⁰³

The forty plants of the *raktasnuhyādigaṇa* consist of: *aṅgāravallikā*, *arkapatrī*, *barhikā*, *brahmaḍaṇḍī*, *cukra*, *drumajyotis*, *hemavallārīkā*, *jīmūta*, *jyotiṣmatī*, *kākamācī*, *kāladaṇḍī*, *kāṣṭhodumbarikā*, *krauñcīkā*, *kṣīrakukkuṭī*, *kṣīramārjārī*, *lāṅgalī*, *mohinī*, *nāgajihvā*, *nāgakanṭhī*, *nāgakarṇī*, *nīlajyotis*, *nīlikā*, *raktāgni*, *raktasnuhī*, *rudantī*, *śākhoṭī*, *śāṅkhapuṣpikā*, *somavallikā*, *sthalapadmiṇī*, *tāmra Vallārī*, *tridaṇḍī* (mentioned twice), *triparṇī*, *triśūlā*, *trṇajyotis*, *uccaṭā*, *udumbarī*, *varā*, *vartulaparṇā*, and *vṛddhadāru* (8.21–28).⁴⁰⁴

The *kadyalyādigaṇa* consists of *drāvaṇī*, *kadalī*, *kākamācī*, *kaṭukoṣātakī*, *kṣīrakāñcukī*, *nirapippalikā*, *śīgrukā*, *sūryabhakta* (8.29–30).⁴⁰⁵ The *kākamācyādigaṇa* comprises *arjunī*, *arkapatrī*, *brāhmī*, *carā*, *haṃsapādī*, *kākamācī*, *kāravallī*, *kāsamarda*, *kṛtāñjali*, *kṣīranālikā*, *kuruvaka*, *lakṣmaṇā*, *meghadhvani*, *nāginī*, *sahadevikā*, *tāmbūlī*, *vārāhakarṇikā*, and *vyālīkā* (8.31–33).⁴⁰⁶ The *bhūpātalyādivarga* is made up of *bhūpāṭalī*, *hemavallī*, *mārkava*, *nāgadhārī*, *paṭolī*, *siṃhavallikā*, *śūkarī*, and *yogārī* (8.45–

46ab). The pañcaratnakagaṇa is composed of indīvarī, kaṅkālakahcarī, mantrasīṇhāsani, niśācarī, and pāṭalā (8.46cd–47).

The viṣavarga of chapter nine consists of kālākūṭa, pīṭa, sāktuka, śṛṅgika, and vaṭsanābha (9.11).⁴⁰⁷ The upaviṣavarga consists of arka, jayā, kanaka, karavīra, lāṅgalī, nīlaka, and viṣamuṣṭi (9.13).

Chapter ten (10.61) mentions, like the *Rasamañjarī* and *Rasaprakāśasudhākara*, eight varieties of vaikrānta.

The sādharmaṇarasas of chapter eleven form a new group, not mentioned under this name in earlier treatises.

The connections between the nine gems and the nine grahas, as found in the *Rasendrācūdamaṇi*, disagree with those mentioned in a number of other treatises (12.1–2).⁴⁰⁸

Chapter fourteen employs the term ariloḥa (14.15ab), without explaining it.⁴⁰⁹ A verse from the same chapter (14.29) asserts that tin, when it touches Rāma's sandals, turns into a kind of silver that cures all diseases. The variety of tīkṣṇaloḥa called tāra-paṭṭa is mentioned (14.80), but not described.

The minor gems (uparatnas), poisons (viṣa) and minor poisons (upaviṣa) are not dealt with as to their purification, properties, uses, etc.; the viṣas and upaviṣas are simply listed (9.11–14).

A complete list of the eighteen saṃskāras of mercury is found in chapter fifteen only (15.28).

Some noteworthy plant names are adrī (9.23), barbūra (14.66 and 143), barbūrī (11.77), karpūragandhinī (9.23), and krūravallī (9.26).

Important is the description of the process by means of which varanāga is prepared from a mixture of nīlāñjana (stibnite) and tīkṣṇaloḥa (4.52cd–53ab). The verse shows that the process by which antimony (varanāga) is obtained was known in India much earlier than in Europe.⁴¹⁰

The author

The author, who was a Hindu,⁴¹¹ as shown by the maṅgalas (1.1–2), addressed to Śiva and Rāma, calls himself Soma (2.1), Somadeva, and Devasūnu (14.199). He was a son of a mantrin called Nārāyaṇa⁴¹² and was of mahāvīravarmaṇa (2.1).⁴¹³ Somadeva himself (15.66) and the colophons add that he was an important person (pati, varapati, puravarapati)⁴¹⁴ at Śrīkaravālabhairavapura(vara).⁴¹⁵ V. Śukla⁴¹⁶ suggested that this may be the name of a village donated to Somadeva by the king whom he served as a minister; Siddhinandana Miśra⁴¹⁷ regards it as the name of a city (śreṣṭhanagarī) or the capital (rājadhānī) of some small kingdom. V. Śukla expressed as his opinion that Somadeva may have been a vaiśya, as indicated by the name of the varṇa to which he belonged. The same author brought forward that he may have been born in Rājasthān and that he settled in Gujārāt or Kāthiāvār later in life.⁴¹⁸

Somadeva was a person of wide learning; he states himself that he was an expert in śāstra and śāstra, Nyāya, Sāṃkhya and Vedānta (nayanaguṇavidhi, satpramāṇa, sāṅkhya, sānta), rasaśāstra and medicine (vaidyavidyā) (2.1).

A work called *Rasendraparibhāṣā* is attributed to Somadeva by G. Hāldār, who also

asserts that Somadeva revised Vāgbhaṭa's *Rasaratnasamuccaya*, and that he collaborated with his teacher Acyuta in writing a joint work, the *Raseśvarasiddhānta*.⁴¹⁹

Date

The reference to Govindabhagavant indicates that the *Rasendracūḍāmaṇi* is posterior to the *Rasaḥṛdaya*. The profuse quotations from Somadeva's work in the *Rasaratnasamuccaya* prove that the latter treatise is later.

An important clue to Somadeva's date is provided by the *Rasasindhu*, which mentions the *Rasendracūḍāmaṇi*. This piece of evidence points to a period before the third quarter of the fourteenth century for the composition of the *Rasendracūḍāmaṇi*.

The *Rasendracūḍāmaṇi* is usually placed in the twelfth or thirteenth century.⁴²⁰

Chapter 12

Rasendramaṅgala to Rasopaniṣad

The Rasendramaṅgala

The *Rasendramaṅgala* by Nāgārjuna¹ is an important and very interesting early treatise. Confusion concerning this work was created by Prafulla Chandra Rāy, who based his studies on the text of the Jammu MS, catalogued as the *Rasaratnākara* of Nāgārjuna; probably he was already aware of the problems caused by this MS, which gives *Rasendramaṅgala* as the title in some of the colophons, but the one who first drew attention to the confusion of the so-called *Rasaratnākara* of Nāgārjuna with the *Rasendramaṅgala*² was P. Cordier.³

A number of Indian scholars also noticed the identity of the so-called *Rasaratnākara* with the *Rasendramaṅgala* and commented on the remarkable fact that all the verses from the *Rasaratnākara* MS in *P.C. Rāy's 'A History of Hindu Chemistry' and P. Rāy's 'History of Chemistry' form part of the *Rasendramaṅgala*. Explicit notice of this may have been given first by Durgāśaṅkar Kevalrām Śāstrī in his *'Āyurvedno itihās' (1942).⁴ Atrideva Vidyālaṅkāra's references to this discovery⁵ were repeated by later Indian authors.⁶

The jumble concerning the *Rasendramaṅgala* was definitely clarified by D. Wujastyk,⁷ who also pointed to the close relationship between Nāgārjuna's *Kakṣapūṭa* and the *Mantrakhanda* of Nityanātha's *Rasaratnākara*.

*Contents*⁸

The *Rasendramaṅgala* consists of about 400 verses, arranged in eight chapters.⁹ The Paris and Bombay manuscripts have the following four chapters: (1) *rasoparasaśodhanādhikāra*, (2) *vajramāraṇasattvapātanābhṛakādīdrutidṛavaṇaloḥamaṇāṇādhikāra*, (3) *bhasmasūṭika*, (4) *guṭikāsattvadrutījalūkāmāraṇādirasabandhana*.

The treatise opens with a maṅgala addressed to Śrīvardhamāna-Jineśvara and the author's teachers, followed by a eulogy of mercury, which bestows Śiva's bliss and enables one to reach the other shore of the ocean of transmigration (*saṃsārasamudratāra*). The title of the treatise that will be exposed (*Rasendramaṅgala*) and the name of its author (Nāgārjuna) are mentioned.

The next verses (3–5) summarize the contents of the eight chapters of the treatise, now called *Rasamaṅgala* (6): (1) the purification (*śodhana*) of the *rasas*, *uparasas* and *lohas*, (2) the killing (*māraṇa*) of *vajra*, etc., and liquefaction (*drāvaṇa*) of all the *dhātus*, (3) *rasabandha*, (4) the preparation and application of pills (*guṭikāvaidhi*), (5) the treatment of all the diseases, caused by *vāta*, etc., (6) the preparation of diverse per-

fumes (citragandhayukti) and ointments (añjana), (7) a treatise on poisons (viṣatantra), (8) groups of substances (gaṇa).

A long series of stanzas in praise of mercury and the physician with expertise in its application (7–17) precedes the section of chapter one that deals with processes (saṃskāra) making mercury fit for therapeutic and alchemical uses.

The five natural blemishes (naisargikadoṣa) of mercury are mala, viṣa, vahnī, gurutva and cāpalya, the two aupādhika impurities (doṣa) arise from tin and lead. These doṣas cause particular disorders and should therefore be removed (18–20). The eighteen saṃskāras are referred to and enumerated: saṃsvedana, mardana, mūrchana, utthāpana, pātana, dīpana, niyamana, rodhana, cāraṇa, the two kinds of druti, jāraṇa, grāsapramāṇa, rañjana, saṃsāraṇa, krāmaṇa, vedha, and yoga (21–23). The purificatory processes (26–31) and the first eight saṃskāras are dealt with (32–39).

The second part of chapter one is devoted to the purification of some rasas and uparāsa¹⁰ (40–48): rājāvarta, rasaka, darada, māksika, manāḥśilā, tāla, abhṛaka, vajra(?), and vaikrānta.¹¹ The last part of the chapter is about the purification of metals and alloys (loha; 1.49–64): śulva (copper), hemaṇ (gold), tāra (silver), āra (brass), ghoṣa (bronze), tīkṣṇa (iron), nāga (lead), and vaṅga (tin).¹²

Chapter two gives an account of the killing and liquefaction of diamonds (vajra) and vaikrānta (1–17), the extraction of the essence (sattvapātana) of mica (abhṛaka), māksika, tāla, rājāvarta, vimāla and abhṛaka,¹³ and the liquefaction (drāvaṇa, druti) of metals and gems.¹⁴ The chapter ends with verses on the killing of metals.¹⁵

Chapter three contains a series of rasas to be used in the treatment of diseases: svacchandabhairava, tīkṣṇamukha,¹⁶ śulva,¹⁷ saṃdhānabhairava, śaṣanagarbha, kāntavallabha,¹⁸ jayamaṅgala,¹⁹ vaḍavāmukha,²⁰ siddhasūtaṇḍa,²¹ sarvājīrṇahara,²² gandhakāḍya, meghanāda,²³ haṃsanāda, nāgendra,²⁴ ravagendra(?), and mṛgāṅka.²⁵ The preparation of mercurial bhasman of various colours is described, together with their medicinal²⁶ and alchemical uses. A few stray verses are about the seven varieties of vaikrānta: white, red, yellow, blue, grey like a pigeon, coloured like a peacock's throat, and green like an emerald. Recipes containing vaikrānta are also given.²⁷ The chapter goes on with a description of the garbhayantra and the preparation of mercurial bhasman, followed by verses extolling the effects of the bhasman, if properly used.

The remaining part of chapter three consists of rasayogas again: saṃkocagolaka (two formulae),²⁸ candraprabha,²⁹ parpaṭī, pramarda...(?), sūryaprabha, pañcāmṛta, laṅkeśvara, māṇikyakhaṇḍa, kruṣeśvara, pratāpalaṅkeśvara, saṃkocapiṣṭikā,³⁰ kanakasamkoca, gaganāḍya,³¹ tīkṣṇamukha,³² ghanagarbha,³³ a piṣṭikā,³⁴ pratāpalaṅkeśvara,³⁵ madāṭyayahara,³⁶ bhasmasūtaka, śulvacūrṇa, rasarāja,³⁷ mahārāsa, gandhamardana,³⁸ pratāpa, gandhajaka(?), gaganamukha, and divjendra;³⁹ some recipes, concerned with the preparation of a particular bhasman or piṣṭikā, are not provided with a name.

Chapter four begins with the description of a mercurial preparation (mahārāsa) used in the transmutation of base metals (lohavedha) and in dehaḍvedha; ten varieties of saṃkalā are characterized.⁴⁰ The next part is concerned with the preparation of pills (guṭikā) with the following names: vajrāṅgasundarī-,⁴¹ amarasundarī,⁴² arkādi-, hemabaddha-,⁴³ māksika-,⁴⁴ vyāghrī-, and vaikrāntaguṭikā.⁴⁵

A section on the bandha (solidification) of mercury follows. Types of bandha characterized are: khoṭa-, sajīva-, piṣṭikā-, druti-, saṅkala-, and jalūkābandha. Three sizes of the jalūkā are mentioned: eight aṅguli for women called bāla, ten aṅguli for women called yuvatī, and twelve aṅguli for women called pragalbhā. Four varieties of such a jalūkā are described; they are employed as female aphrodisiacs, to be put into the vagina.⁴⁶

The next part of chapter four deals with prescriptions which suppress ejaculation (vīryastambha) and facilitate luring women (drāvaṇa). One formula is called kāmāṅkuśarasa.⁴⁷ Prescriptions increasing the size of the penis in men and of the breasts in women, etc., are also found in this part of the chapter.

Chapter four proceeds with a section devoted to jāraṇa and other saṃskāras, employed in aurification. The *Kakṣapuṭa* and an authority called Nāgabuddhi are mentioned.

The section that follows is very important in presenting the great Siddha Nāgārjuna, expounding his alchemical doctrines on the sacred mountain Śrīśaila to Ratnaghoṣa,⁴⁸ who asks for instruction in the arts of aurification and rasāyana. Nāgārjuna, complying with this request, relates that these arts were revealed to him by the Vāṭayakṣiṇī, propitiated after twelve years of penance. King Śālivāhana, who dedicated treasures of gold and gems to the Yakṣiṇī, is represented as having approached her too, eager to learn about alchemy.⁴⁹

The Vāṭayakṣiṇī declares that she is going to set forth the methods of aurification developed by Māṇḍavya and his pupil Vasiṣṭha, laid down in the *Vasiṣṭhamāṇḍavyaśāstra*, a treatise explained to her by her teacher. She transmits Māṇḍavya's views on transmutation, followed by an exposition on rasabandhana.⁵⁰

Ratnaghoṣa appears again on the scene, asking Nāgārjuna questions on rasāyana and dehasiddhi. Nāgārjuna gives an exposition on these subjects;⁵¹ one of the procedures explained is called bhūtakālāntakabandha. Ratnaghoṣa wants to know how dehasiddhi can be attained if one is unable to perform the bhūtakālāntakabandha. Nāgārjuna teaches him an alternative method, called khecarabandha, in which jāraṇa of gems is an essential process. If this bandha is successfully performed, Śiva himself will make his appearance, praising the expert alchemist and promising him a long life in heaven, accompanied by the enjoyment of the daughters of Rudra, Viṣṇu and Brahmā.

The last part of chapter four gives the characteristics of śuddha, baddha, mṛta and mūrchita mercury;⁵² the six types of solidified (baddha) mercury are described: khoṭa-, pada-, jalūka-, bhasma-, mūrṭi- and mūrchitabaddha. The chapter ends with a concise exposition on the saṃskāras.

The general contents of chapters five to eight are known from the references in the short table of chapter one. Chapter five, on the treatment of diseases, is referred to in chapter three.⁵³ The commentary (ṭippana) on the *Rasendramaṅgala* explains some parts of chapter five, dealing with the treatment of vātavyādhi, atīśāra and kuṣṭha. It probably also mentions the gandhayukti section of chapter six.

The list of apparatus at the end of the Jammu MS of the so-called *Rasaratnākara* of Nāgārjuna⁵⁴ actually forms part of the ṭippana on the *Rasendramaṅgala*. This list⁵⁵ enumerates the following yantras: śilā-, pāṣāṇā-, bhūdhara-, vaṃśa-, nalikā-,⁵⁶

gajadanta-, dolā-, adhaḥpātana-, bhuvahpātana-, pātana-, niyāmaka-, gamana-,⁵⁷ tulā-, kacchapa-, cākī-, vālukā-, agnisoma-, gandhakatrāhika-,⁵⁸ mūṣā-, kamabhājana-,⁵⁹ ghoṇā-⁶⁰ gudābhraka-,⁶¹ nārāyaṇa-, jālikā-,⁶² and cāraṇayantra-;⁶³ a haṇḍikā also forms part of the list.

The *Rasendramaṅgala* is quoted or referred to in the *Bhāvaprakāśa*,⁶⁴ Caturbhujā's commentary on the *Rasaḥṛdaya*, the *Kūpīpakvarasanirmāṇavijñāna*, *Rasakakṣāpuṭa*, *Rasasindhu*, *Rasatattvavivecana*, *Rasayogasāgara*,⁶⁵ *Rasendrasambhava*, and *Ṭoḍara*'s *Āyurvedasaukhya*.⁶⁶

Some verses of the *Rasendramaṅgala* form also part of the *Rasārṇava*⁶⁷ and Vā-gbhata's *Rasaratnasamuccaya*.⁶⁸

Formulae from the *Rasendramaṅgala* occur in the *Basavarājīya*,⁶⁹ in Kāśinatha's *Cikitsākramakalpavallī*,⁷⁰ Narapati's *Narapatījayacaryā*,⁷¹ the *Rasacandāṇḍī*,⁷² *Rasakalpatā*,⁷³ *Rasakāmadhenu*,⁷⁴ *Rasarājasundara*,⁷⁵ *Rasaratnākara*,⁷⁶ *Rasaratnakau-mudī*,⁷⁷ *Rasaratnasamuccaya*,⁷⁸ *Rasārṇava*,⁷⁹ *Rasāvatāra*,⁸⁰ *Rasendracintāmaṇi*,⁸¹ *Rasendrakalpadruma*,⁸² *Rasendraratnakośa*,⁸³ *Rasendrasārasaṅgraha*,⁸⁴ *Vaidyacintāma-ṇi*,⁸⁵ and *Yogamahārṇava*.⁸⁶

The author⁸⁷

The *Rasendramaṅgala* mentions Nāgārjuna as its author in one of the introductory verses. The colophons attribute the work to Nāgārjuna too. In spite of this, it appears doubtful that the famous Siddha Nāgārjuna wrote the work, because stories about him are told in chapter four. The *Rasendramaṅgala* was more probably composed by some unknown author in a period in which tales about the colourful personality of the alchemist Nāgārjuna were already current.⁸⁸ The *Kakṣapuṭa*, usually ascribed to Nāgārjuna, is mentioned in the *Rasendramaṅgala*. An authority called Nāgabuddhi, known as one of the Rasasiddhas, figures in the treatise as the discoverer of a rasa that transmutes one hundred times its amount of base metal into gold; he is represented as inspired by Buddhist doctrines.⁸⁹

The religion of the author was apparently of a syncretistic type.⁹⁰ The introductory verses pay homage to Vardhamāna-Jineśvara and Śiva; the deity Prajñāpāramitā figures in the formula of tīkṣṇamukharasa. Deities of the Hindu pantheon are frequently mentioned: Bhairava, Brahmā, Caturbhujā, Gaṇanātha, Janārdana, Kālī, Pārvatīnātha, Viṣṇu, etc.

The Kāpālikas were known to the author.⁹¹ The *Brahmayāmala* is referred to as the source of the formula called vajrāṅgasundarīvaṭī.⁹²

Date

The *Rasendramaṅgala* is often thought to be a very early work, dating from the seventh, eighth or ninth century.⁹³ Its attribution to Nāgārjuna is rarely put into question.

As already pointed out, it is hardly credible that Nāgārjuna was the author of the work. Its chronological position depends for that reason on internal evidence and quotations from it in later works. The quotations in the *Rasasindhu* prove that the *Rasendramaṅgala* is earlier than the third quarter of the fourteenth century.⁹⁴ The upper limit is conditional upon the date of the Nāgārjuna and the king called

Śālivāhana who figure in chapter four, and the stories about these persons.

Atrideva⁹⁵ was convinced that the *Rasendramaṅgala* is posterior to the eleventh or twelfth century, because the vālukāyantra was known to its author.⁹⁶ This argument can be disregarded, for the list of yantras forms part of the commentary and does not belong to the treatise itself.

Commentary

The commentary (ṭippaṇa) on the *Rasendramaṅgala* consists of short explanations concerning the alchemical procedures described in the text. Many names of plants are elucidated by means of synonyms.

The ṭippaṇa on chapter two contains a list of yantras.⁹⁷ The section of chapter four in which Nāgārjuna, Ratnagoṣa and Śālivāhana figure is not commented upon.

The comments on chapter five have partly been preserved and the section on gaṇḍhayukti of chapter six is referred to.

The last three parts of the ṭippaṇa are concerned with subjects which are not listed in the table of contents of chapter one. These parts are about metals, in particular iron (loha), and the use of metallic preparations for rasāyana purposes. The commentator remarks that Nāgārjuna distinguished eighteen kinds of loha, enumerated and discussed by him. The names of these types can be reconstructed by help of a passage from Ācāhamalla's commentary on the *Śāringadharaśaṃhitā* where they are listed and also said to derive from Nāgārjuna. Their names are: māṇḍūra, māṇḍūka, sāra, madhyasāra, sthūlasāra, cakramarda, bandha, vajraka, surāyasa, kaliṅga, bhadra, garala, sthita, vajra, pāṇḍinirava, arbudaka, kānta, and kuliśa.⁹⁸

The ṭippaṇa on the part describing loharasāyanas mentions the four periods of a man's life: bāla, kumāra, yuvan, sthavira.

The opening lines of the ṭippaṇa state, after a maṅgala, addressed to Śiva, that its author studied the opinions of twenty-seven Siddhas, various sciences, *Nighaṇṭus*, the *Vaidyakraṭya*, and the regional names of plants.

The names of the twenty-seven Siddhas are those found in the *Rasaratnasamuccaya*, which is not mentioned as a source.

The name of the author of the commentary remains unknown. A commentary on which no details are available is attributed to Govindacandra.⁹⁹

The *Rasendrapurāṇa*

The *Rasendrapurāṇa* was written by Rāmaprasāda.¹⁰⁰

Contents

The work consists of 2,655 verses, arranged in thirty chapters (adhyāya). It is written in the form of a dialogue between Śiva as a teacher and Vīrabhadra as his pupil.

Chapter one (126 verses) introduces the subject of the book: rasavidyā; it describes its divine origin (5–30)¹⁰¹ and praises the wonderful properties of mercury (31–59). The names of mercury are enumerated (60–61), Śiva's abode in the Himālaya is described (62–71), and an account is given of the mythical origin of mercury (72–78).

Five varieties of mercury are distinguished and their properties described (79–88). These five kinds are: *rasa*, *rasendra*, *sūta*, *pārada* and *miśraka*.¹⁰²

Chapter two (*nānārthavivecanīya*; 218 verses) is about technical terms (10–37), weights and measures (38–50), the types of *puṭa* (51–66), and the *yantras* (67–218).

Chapter three (*pāradaśaṃskāraṇa*; 329 verses) begins with the construction of the *rasaliṅga* and its *pūjā*. The eight *mahādoṣas* or *naisargikadoṣas* and the seven *kañcukas* are dealt with (6–15). The *rasaśālā* is described (17–21). The *śaṃskāras* are listed: the series of eighteen (31–32), the eight *śaṃskāras* employed for medicinal purposes (33; quoted from the *Rasapaddhati*), and a less usual series of nineteen (35). The eight *śaṃskāras* which result in a purified mercury, suitable to medicinal use, are described (39–88). The process called *anuvāsana* is added (89). Mercury is said to be completely purified if one-eighth of the original quantity remains (90). The preparation of mercury from *cinnabar* is dealt with (91–94), followed by the purification of mercury by means of the *taptakhalva* (95–96), and the *mukhakarāṇa* and *pakṣacchedana* of purified mercury (97–104). Several methods of preparing the form of mercury called *candrodaya*, a substance used as a drug, are described (120–151).¹⁰³ Other subjects of chapter three are *kṣetrikarāṇa* (152–156), the preparation of *rasasindūra* (157–169), the varieties of *rasabhasman* (170–179), the preparation of *rasakarpūra* (187–207), the *sabīja* and *nirbīja bandha* of mercury (208–209), the twenty-five or twenty-six varieties of *bandha* (210–249), the sixty-four *divyaśaḍhis* (238–246), *gandhaka jāraṇa* (258–292), and the formulae of a number of pills (*guṭikā*; 300–328).¹⁰⁴

Chapter four (*pāradaśaṃskāriyāṇa*; 99 verses) gives information on the killing of mercury (1–26); the remaining part of the chapter is devoted to rules about the use of mercurial ashes and the treatment of disorders caused by injudicious use. Chapter five (*hīṅgulasindūraṇa*; 48 verses) describes *cinnabar* (*hīṅgula*), its purification and killing (1–36ab), as well as *sindūra* and its purification (36c–48); three varieties of *hīṅgula* are distinguished: *carmāra*, *śukatuṇḍaka* and *haṃsapāda* (6–7). Chapter six (*gandhapāṣāṇaṇa*; 56 verses) is concerned with sulphur (*gandhapāṣāṇa*), its mythical origin, properties, purification, and medicinal uses.

Chapter seven (*gaganavarṇa*; 196 verses) is about mica (*abhraka* = *gagana*). Subjects dealt with are: the *mahārasas* (2), the mythical origin of mica (6–10), its varieties and their properties (11–22), the harmful effects of impure mica (25–26), its purification (27–29), the preparation of *dhānyābhraka* (30–33), ways of killing it (34–87), *abhrakabhasman* and its *amṛtikarāṇa* (98–116), the extraction of *abhrakasattva* (118–140),¹⁰⁵ its purification (141–142), killing (143–160) and *druti* (161–176), and finally the uses of mica and its products (180–195).

Chapter eight (*haritālaprakarāṇa*; 176 verses) describes the mythical origin of *haritāla* (3), its varieties (4–9), properties (11) and purification (14–21); various ways of killing it (22–146) and several ways of extracting its essence (156–168) are dealt with; the chapter ends with the medicinal uses of *haritāla*. (169–175). Chapter nine (*añjanakāśisagairikavarṇa*; 44 verses) gives an account of *añjana* (3–21), *kāśisa* (22–37) and *gairika* (38–43), their varieties, purification and *sattvapātana*.

Chapter ten (*uparasavarṇa*; 78 verses) is concerned with the *uparasas*, their varieties, properties, purification and medicinal uses. The extraction of the essence of *tuvaṛi*

is described (23), as well as the killing and the extraction of the essence of manañśilā (40–45), and the killing of varāṭikā (65).

Chapter eleven to seventeen are devoted to the seven metals (dhātu), their origin, names, varieties, properties, purification, killing, druti and medicinal uses. Chapter eighteen describes mañḍūra and chapter nineteen the alloys.

Chapter twenty to twenty-six are concerned with a series of upadhātus, their origin, names, varieties, properties, purification, killing, and medicinal uses. If relevant, the extraction of the sattva is described, and, occasionally, the killing and drāvaṇa of the essence.¹⁰⁶ The upadhātus dealt with are: svarnamākṣika (chapter twenty), tāmākṣika (chapter twenty-one), vimāla (chapter twenty-two), tuttha (chapter twenty-three), capala and kaṅkuṣṭha (chapter twenty-four), rasaka (chapter twenty-five), and śilājatu (chapter twenty-six).

Chapter twenty-seven gives an account of the eight sādhanārasas, their names, properties, etc. Chapters twenty-eight and twenty-nine are about the nine ratnas and the uparatnas, their names, varieties, properties, killing, etc. Precious stones dealt with are: vajra (28.35–134), pravāla (28.135–150), mauktika (28.151–183), marakata (28.184–190), vaidūrya (28.192–196), gomeda (28.197–200), māṇikyā (28.201–204), nīla (28.205–212), and puṣparāga (28.213–217). Chapter thirty describes the viṣas and upaviṣas, their names, properties, purification, uses, etc.

Sources are occasionally referred to: *granthāntara* (6.10–12), *Purandararāhasya* (3.255), *Rasadarpaṇa* (25.18), *Rasapaddhati* (3.33; 25.19), *Rasārṇava* (17.7), *Rasasindhu* (3.285–287), and *Ṭoḍarānanda* (25.28).

Authorities mentioned are: Bhāluki (24.19), Caraka (1.11), Hārīta (1.11), Nāgārjuna (3.76; 25.17), Suśruta (1.11), and Vāgbhaṭa (1.11; 24.20).

A large number of the verses of the *Rasendrapurāṇa* may have been composed by the author. Part of the verses have been taken from sources not referred to, for instance, the *Rasasaṅketakalikā*,¹⁰⁷ *Rasaratnasamuccaya*,¹⁰⁸ and *Rasendrasārasaṅgraha*.¹⁰⁹

The *Rasendrapurāṇa* is quoted in the *Rasendrasambhava*. The author of the latter work often quotes from the *Rasendrapurāṇa* without indicating his source.¹¹⁰

Special features

The *Rasendrapurāṇa* is a treatise on iatrochemistry, which explains that it describes the eight saṃskāras which render mercury suitable to medicinal purposes. The other saṃskāras, which are necessary for deha- and lohasiddhi, are not dealt with. The medicinal properties and uses of alchemical products are systematically taken into consideration.

The naisargikadoṣas of mercury are: asahyāgni, cañcalya, giri, mala, nāga, raṅga (= vaṅga), vahni, and viṣa (3.6); the names of the seven kañcukas are: andhakārī, bhedī, dhvāṅkṣī, drāvī, malakarī, parpaṭī, and pāṭalī (3.10). The list of eighteen saṃskāras comprises svedana, mardana, murchana, utthiti, patana, rodha or bodha, niyāmana, saṃdīpana, gaganabhakṣaṇamāna (= abhṛakagrāsamāna), saṃcāraṇa, garbhadruti, bāhyadruti, jāraṇā, grāsa, sāraṇa, saṃkrāmaṇa, vedha, and śarīrayoga¹¹¹ (3.31–32). A slightly different series of nineteen items is also mentioned; this series adds anuvāsana and replaces grāsa by rañjana (3.35). The forms of mercury called āroṭaka,¹¹² candrodāya, baddha and mṛta are defined; mercury is designated as āroṭaka

when it is still able to move about (cala), as candrodāya when it has assimilated sulphur; it is baddha when able to withstand the fire,¹¹³ and it is a bhasman or mṛta, when killed (3.38–39). The twenty-five or twenty-six types of bandha are anonymously quoted, probably from the *Rasaratnasamuccaya*; another classification into four types is also recorded: poṭa- or parpatikā-, khoṭa- or piṣṭi-, jalaukā- or pakva-, and bhasmabandha (3.250–251).¹¹⁴ Two types of rasabhasman are described: ūrdhvaga- and talabhasman;¹¹⁵ rasakarpūra and rasasindūra belong to the former type (3.252–254).

The eight mahārasas are: abhra, vaikrānta, mākṣika, vimala, adrija, sasyaka, capala and rasaka (7.2). The rasas are: mercury, sulphur, mica, haritāla, añjana, kāsīsa and gairika (7.4).

Haritāla is of two or four varieties; the two varieties are patrākhyā and piṇḍa, the four varieties are piṇḍa, pattra, godanta and vakadāla (8.4–9). Añjana is of two types: yāmuna and kāpota (9.2), or five types: sauvīra, rasāñjana, srotoñjana, puṣpāñjana and nīlāñjana (9.4–10); rasāñjana is described as either pītacandanāniryāsa or dārvīkvātha (9.6 and 16); kulatthāñjana is added (9.17–18). Kāsīsa is of three varieties: white, śyāma and yellow; the yellow variety is called puṣpakāsīsa or taijika (9.22–24); according to another opinion, kāsīsa is of two varieties, called vālūkā- and puṣpakāsīsa (9.25–26). Two varieties of gairika are described: pāṣāṇagairika and svarṇagairika (9.39–40).

The uparasas are: ṭaṅkaṇa (10.7–14), tuvarī (10.16–28),¹¹⁶ manāḥśilā (10.30–49), śaṅkha (10.51–55),¹¹⁷ khaṭī (10.56–58), varāṭikā (10.59–68),¹¹⁸ śukti (10.69–72), śambukā (10.73–74), and sikatā (10.75–77).¹¹⁹ Three varieties of ṭaṅkaṇa are described: sphatikābha, gudaprabha and pāṇḍura or nīlakaṇṭha, two varieties of tuvarī: sphatikā and chillikā or phullatuvarī,¹²⁰ three varieties of manāḥśilā: śyāmāṅgī, karavīrikā and dvikhaṇḍākhya, two varieties of khaṭī: khaṭī and gaurakhaṭī.

The seven metals (dhātu) are gold, silver, copper, tin, zinc, lead and iron (11.1). The chapter on copper includes verses on bhūnāga (13.41–54) and the sattva of mayūrapiccha (the tail feathers of the peacock; 13.54). Two varieties of zinc (yaśada or kharpara) are distinguished: yaśada and śavaka (15.2). Three types of the bhasman of lead are mentioned: harit, vidyudābhāsa and sindūra (16.20–25). Three types of iron are described: muṇḍa, tīkṣṇa and kāṇṭa (17.3). Muṇḍa is of three varieties; mīḍu, kuṇḍa and kāṇḍāra, tīkṣṇa of six varieties: kharasāra, hottāla, tāravatṭa, viḍa, kālaloḥa, and gajākhyā; kāṇṭa is of four varieties: romaka, bhrāmaka, cumbaka and drāvaka, but the *Rasārṇava* is reported to describe a fifth variety, called karṣaṇa (17.4–7). Gajākhyaloḥa is not described; instead, vajraloḥa and its ten varieties are mentioned: asita, kāla, lohākhyā, rakta, lohita, vajraka, māyūravajraka, tittiravajraka, rohiṇīvajraka, and śukavajraka (17.19–20). Five varieties of romaka are referred to: ekāśya, dvimukha, vedāśya, śaṅkhacakra and sarvatomukha (17.24). A type of loḥa added is called pāṇḍyaloḥa (17.26). The alloys (mīśrakadhātu) described are kāṁśya and pittala (19.2–22), pañcaloḥa (19.23–25), and vartaloḥa (19.26).

Two series of upadhātus are enumerated; the first series consists of mākṣika, tutthaka, abhra, nīlāñjana, śilā, ālaka and rasaka, to which vimala is sometimes added as the eighth item; the second series comprises suvarṇamākṣika, tāramākṣika,¹²¹ tuttha, kāṁśya, pittala, sindūra and śilājatu (20.2–3). Vimala is dealt with in one of the chap-

ters (twenty-two) on the upadhātus; three varieties are distinguished: hema-, tāra-, and kāmśyavimala (22.2–4); its sattva is described as white and resembling candrārka (22.10–13). Two varieties of tuttha are described: sasyaka and kharpara (23.2–4); its sattva is indragopākṛti and the same as copper (23.13–14). Capala is described in one of the chapters on the upadhātus (twenty-four), although some regard it as a mahārāsa or uparāsa (24.5). The same chapter deals with kaṅkuṣṭha, two varieties of which are distinguished: nalika and reṇuka (24.16–18); Bhāluki is referred to, who considers kaṅkuṣṭha to be an upadhātu of tin (vaṅga) (24.19). The identity of rasaka is discussed (25.1–15); its sattva resembles tin (25.33). The sattva of śilājatu is described as resembling iron (26.53). Soraka is regarded as a variety of śilājatu (26.54–56).

The sādharmaṇarasas are kāmpilla, capala, gaurīpāśāṇa, naraśāraka, kapardī, vahnijāra, girisindūra, and kedāraśṛṅga (27.2–3). Gaurīpāśāṇa is of two varieties: an artificial variety, white in colour, and a yellow one, occurring naturally (27.8). The chapter on the sādharmaṇarasas also deals with samudraphena (27.40–41), bola (27.42–47)¹²² and guggulu (27.48–58); kapardī, girisindūra and kedāraśṛṅga are not discussed.

Nine ratnas are listed: vajra, vidrūma, mauktika, marakata, vaidūrya, gomedaka, māṇikyā, harinīla, and puṣpadrśad (28.5). The ratnas are also divided into four uparatnas and five mahāratnas (28.6). The maṇis consist of vaikrānta, sūryakānta, hīraka, mauktika, candrakānta, rājāvarta, garuḍodgāraka, puṣparāga, mahānīla, padmarāga, pravālaka, vaidūrya and nīla (28.8–9). Rājāvarta, puṣpa, mauktika, vidrūma and vaikrānta belong to the group of maṇirasas (28.10). Eight sources (yonī) of pearls are enumerated: śukti, śaikhā, the elephant, boar (kṛda), serpent, frog and bamboo (veṇu) (28.151); clouds (megha) are added to this series (28.165–167); pearls from Persia (pārasikodhava), Arab countries (bārbara) and the West (rūmajasaṃbhava) are described too (28.168).

Uparatnas described are: vaikrānta (29.6–32), sūryakānta (29.38–39), candrakānta (29.40–41), rājāvarta (29.42–51), pīroja (29.52–53), and sphāṭika (29.54–58). Seven or eight varieties of vaikrānta are mentioned (29.10–14).

Eighteen kandaviṣas are enumerated and discussed: binduka, cakra, hālāhala, hāridra, harita, kālakūṭa, kardama, markāṭaka, mayūrākhyā, musta, puṣkara, saktuka, śaikhānābha, śikhī, śṛṅgī, sumāṅgala, vāluka, and vatsanābha (30.11–20). A division into eight saumya and ten ugra poisonous substances is quoted; the eight saumya types are: dāraka, kaurma, mustaka, saikata (= vāluka), saktuka, sārśapa, śvetaśṛṅgī, and vatsanābha (30.21–24). Lists of thirteen (30.32–33) and nine poisonous substances (30.38) are also cited; the series of thirteen consists of: hālāhala, haridraka, kālakūṭa, kardama, karkāṭa, mahāviṣa, mūlaka, mustaka, saktuka, sarśapa, śṛṅgaka, vāluka, and vatsanābha; the series of nine viṣas comprises brahmaputra, haridra, hālāhala, kālakūṭa, pradīpana, saktuka, saurāśṭrika, śṛṅgaka, and vatsanābha.¹²³

Two series of upaviṣas are enumerated. The first series (30.16) consists of āphūka (= ahiphena), arka, guṇjā, hayārī, jaipāla, lāṅgalī, snuhī, unmatta, and viṣamuṣṭika; the second series (30.161–162) is composed of ahiphena, bhallātaka, dhattūra, guṇjā, karavīra, khākhāsa, lāṅgalī, nirviṣī, and viṣamuṣṭi. Vijayā and sehuṇḍa are also described as upaviṣas (30.184–185).¹²⁴

The sixty-four divyauśadhis listed (3.238–246) are: somavallī, jalasthapadminī,

ajagarī, gonasī, trijaṭā, īsvarī, bhūtakeśinī, kṛṣṇavallī, rudravantī, vārāhī, sarvarā, aśvatthapattrī, amlapattrī, cakranāsā, aśokikā, punnāgapattrā, nāgā, kṣetrikā, śavarī, devīlatā, vajravallī, citrakā, kālaparṇikā, nīlotpalī, rajanī, palāśatilakā, siṃhikā, go-
ṣṭhārgī, khadirapattrikā, tṛṇajyotis, raktavallī, brahmadāṇḍī, madhutṛṣā, padmakandā, hemadaṇḍī, vijayā, ajayā, jayā, nalī, śrīnāmnī, kīṭamārī, tumbikā, kaṭutumbī, mayūra-
śikhā, hemalatā, āsurī, saptaparṇī, gomārī, pītakṣīrikā, vyāghrapāḍalātā, dhanurvallī, trīśūlinī, śṛṅgī, tridaṇḍī, vajravallarī, mahatī, raktakandavatī, bilvadalā, rohiṇī, gorocanā, bilvataṅgī, kandapattrikā, viśalyā, and kandakṣīrā.¹²⁵

The plants, plant products, and other substances belonging to the abhramakā-rakagaṇa are: agni (= citrakā), agnimantha, ambhakumbhī (= jalakumbhī), anantā, anilārī, ārdṛā, aśvagandhā, bhārgī, bhṛṅgarāja, bilva, cow's urine, dāḍima, devadālī, devadāru, dhātrī, dhattūrā, dūrvā, goat's blood, guḍūcī, harītakī, indrāyaṇī, kākamācī, kali, kapitha, kāravī, kāsamarda, kaṭu, kharamaṇjarī, kiṃśuka, koṣātakī, kumārīkā, kumbhī, līṅgī, lodhra, maṇḍūkaparṇikā, marīcaka, mīnākṣikā, muni, mūśakaparṇī, mustā, nāgavallī, nata, the two parṇīs (i.e., śālīparṇī and pṛśnīparṇī), pāṭalikā, puna-
navā, rambhā, the milky juice of ravi (= arka), śaṅkhaṇḍī, saptaparṇaka, śatāvarī, siddhārthaka, tailaparṇī, tālamūlī, tālīsapattra, tiktā, tinduka, trikaṇṭha, vajrī, vartākīnī, the milky juice and the young shoots of vaṭa, vijayā, vṛndā, and vṛṣa (7.88–92).¹²⁶

Some noteworthy names of plants are: āmraharidrā (8.151), gaṅgātīriyā (8.99), hu-
lhula (8.131), and pītapuṣpī (8.132).

The author

Rāmaprasāda, born in 1874 or 1875, was a rājavidyā of Paṭiyālā, where he founded an Āyurvedic College. He also wrote the *Āyurvedasūtra* and Hindī translations of the *Carakasamhitā* and *Aṣṭāṅgahṛdaya*.¹²⁷ Rāmaprasāda was the father of Shiv Sharma.

Date

The first volume of the *Rasendrapurāṇa* was completed in 1926 or 1927.

The Rasendrasambhava

The *Rasendrasambhava* by Viśvanātha Dvivedī¹²⁸ is a treatise that mainly deals with iatrochemistry.

Contents

The treatise consists of 4,162 verses, arranged in five chapters (prakaraṇa) and a pari-
śiṣṭa.

Chapter one (paribhāṣyaprakaraṇa; 460 verses) is preceded by a maṅgala and some verses enumerating and praising the originators (pravartakāḥ) of āyurveda; the chapter itself deals with technical terms (paribhāṣā); it lists the components of a large number of groups of substances derived from āyurveda and rasaśāstra; added are the properties of the tastes, rules concerning pharmaceutical preparations, definitions of alchemical terms, descriptions of several types of mūśā, puṭa and yantra.

Chapter two (śodhanamāraṇādīprakaraṇa; 806 verses) is divided into five sections

(adhikāra). Section one (rasoparasādhikāra; 2.1–230) is concerned with mercury (1–66) and the uparasas: cinnabar (hiṅgula; 70–77), rasakarpūra (78–84), sulphur (gandhaka; 85–91), mica (abhraka; 92–122), manahśilā (123–132), haritāla and godantiharitāla (133–160), dugdhapāsāṇa (161–167), kampilla (168–169), tuvarī or sphaṭikā (170–172), ṭaṅkaṇa (173–180), śilājātu (181–195), bola (196–202), saurāṣṭrī (204), khaṭī (205), gairika (206–210), and capala (211–230). The varieties, properties and purification of these substances are described, and, where appropriate, their killing (māraṇa), the extraction of their essences (sattvapātana), etc.

Section two (dhātūpadhātavadhikāra; 2.231–524) gives an account of the seven metals (dhātu): gold (232–252), silver (253–266), copper (267–292), iron (293–334), zinc (335–355), lead (356–371), and tin (372–391), followed by verses on kāmṣya (392–399), pittala (400–406), maṇḍūra (407–417), and the seven upadhātus: mākṣika (425–451), vimala (452–458), tuttha (459–472), kāntapāsāṇa (473–481), rasaka or kharpara (482–492), añjana (493–497), and kaikuṣṭha (498–505); added to the upadhātus are: sindūra (506–509), kāsṭsa (510–516), narasāra (517–518), soraka (519–520), agnījāra (521–522), and samudraphena (523–524). The varieties, properties and purification of these substances are discussed, and, where appropriate, their killing, the extraction of their essences, etc.

Section three (ratnaparatnādhikāra; 2.525–630) is about the nine ratnas: vajra (527–547), māṇikya (548–554), puṣparāja (555–558), tārṅṣya (559–562), nīla (563–566), vaidūrya (567–570), gomeda (571–574), vaikrānta (575–580), and vidruma (581–593), followed by the uparatnas: sphaṭika (597–599), sūryakānta (600–604), candrakānta (605–607), peroja (608–609), rājāvarta (610–614), raktapāsāṇa (615–618), vyomaśman (619–622),¹²⁹ tṛṇakānta (623–624), kolopala (625–627),¹³⁰ and viṣamuktā (628–630). The purification and killing of these precious and semi-precious stones are described, together with their properties.

Section four (mauktikopamauktikādhikāra; 2.631–654) discusses pearls (mauktika; 631–640), and the group called upamauktika (641–654), their varieties, properties, purification, killing, etc.; the upamauktikas are the shells called śukti, śaṅkha and kapardaka.

Section five (viṣopaviṣādhikāra; 2.655–806) deals with poisonous substances of mineral, vegetable and animal origin, their varieties, properties, purification, etc.; the treatment of poisoning by these substances is also described. A poisonous mineral discussed is gaurīpāsāṇa, also called malla (657–664). The vegetable poisons are divided into viṣas and upaviṣas. The group of nine viṣas consists of halāhala, kālakūṭa, brahmaputra, pradīpana, saurāṣṭrika, haridra, śṛīgaka, saktuka, and vatsanābha; the eleven upaviṣas are viṣamuṣṭi, unmatta (= dhattūra), agni (= bhallātaka), jaipāla, guñjā, jayā (= bhaṅgā), āphūka (opium), snuhī, arka, hayamāra (= karavīra), and lāṅgalī (665–741). Verses are added about the purification of the seeds of vrddhadāraka, eraṇḍa, nimbū, dantī, indravaruṇikā, karañja, and a series of other plants and medicinal substances of plant origin (742–757). The remaining part of the chapter is devoted to poisons of animal origin.

Chapter three (rasaprakaraṇa; 1,606 verses) is a collection of rasayogas against the diseases described in the *Mādhavanidāna*; the author added a number of disorders

found in later treatises.

Chapter four (kuppīpakvarasaparpatīlauhaprakaraṇa; 619 verses) is divided into five sections (adhikāra), the first three of which deal with kuppīpakvarasas.¹³¹ Section one (rasasindūrādhikāra; 4.1–49) gives an account of the preparation and the properties of a series of sindūras: rasa-, svarṇa-, tāra-, tāmra-, nāga-, vaṅga-, abhra-, tāla-, śilā-, malla-, and viṣasindūra. Section two (makaradhvajādhikāra; 4.50–84) is devoted to the preparation of a number of varieties of makaradhvaṇa and its medicinal properties. Section three (anyakuppīpakvarasa; 4.85–123) is concerned with the preparation and medicinal uses of candrodaya, kāmadevarasa, anarigasundararasa, svarṇavaṅga, and rasakarpūra. Section four (parpatīkādhikāra; 4.124–224) deals with the preparation and medicinal actions of a number of parpatī: rasa-, pañcāmṛta-, prāṇada-, vijaya-, lauha-, tāmra-, svarṇa-, ratnaparpatī, and some preparations of the same type. Section five (lauhaprakaraṇa; 4.225–619) describes a large number of metallic preparations (lauha) against diseases which are arranged in the same way as in chapter three, but with a smaller number of new syndromes added to those of the *Mādhavanidāna*.

Chapter five (sahapānānupānāpathyāpathyaprakaraṇa; 622 verses) begins with definitions of sahapāna and anupāna (5.1–11); the whole chapter is devoted to descriptions of these drinks, to be taken together with a drug (sahapāna) or after its ingestion (anupāna).¹³² Verses on what is wholesome (pathya) or unwholesome (apathya) in a particular disorder are added.¹³³ The arrangement of the diseases is the same as in chapter three again. Some verses containing information on the author are appended to chapter five.

The pariśiṣṭa chapter (vaṭīprakaraṇa; 42 verses) contains a number of recipes for pills called vaṭī.

Sources mentioned by the author in the bhūmikā to the edition of his work are: *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bhelasamhitā*, *Cakradatta*, Caraka,¹³⁴ Dhanvantari, *Gadanigraha*, Harīta, *Rasacaṇḍāṃśu*, *Rasahrdaya*, *Rasakāmadhenu*, *Rasakautūhala*, *Rasamañjarī*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnapradīpikā*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasatantrasāra*, *Rasataraṅgiṇī*,¹³⁵ *Rasāyanasāra*, *Rasayogasāgara*, *Rasendramaṅgala*, *Rasendrasārasaṃgraha*,¹³⁶ Śārṅgadharma, Suśruta, Vāgbhaṭṭa,¹³⁷ Vaṅgasena, *Yogacintāmaṇi*, *Yogaratnākara*, and *Yogatarāṅgiṇī*.

Additional sources are the *Rasendracūḍāmaṇi*¹³⁸ and *Rasendrapurāṇa*.¹³⁹

Special features

The originators of āyurveda, both the prāṇacāryas and the Rasasiddhas, listed in the introductory verses are: Agasta, Agniveśa, Atri, Bhairava, Bhallukī, Bhāskara, Bhela, Brahmā, Caraka, Dhanvantari, Gahanānanda, Gorakha, Govinda, Kākacaṇḍīśvara, Kapālika, Lankeśa, Māṇḍavya, Manthānabhairava, Matta, Nāgabodhi, Nāgārjuna, Nandin, Naravāhana, Narendra, Pāṇina, Ratnakośa, Śambhu, Śaṃkara, Śārāṅgadharma, Suśruta, Svachchandaḥhairava, Vāgbhaṭṭa, Viśārada, Viṣṇu, Vyādi, and Yaśodhana.

Noteworthy yantras described are: kavacīyantra (1.346–348), ṭaṅkayantra (1.372–373),¹⁴⁰ tejayantra (1.383–386),¹⁴¹ jalayantra (1.399–408),¹⁴² gaurīyantra (1.417–421),¹⁴³ bakayantra (1.441),¹⁴⁴ nāḍikāyantra (1.442–446),¹⁴⁵ and kandukayantra (1.454–457ab).

Eight naisargikadoṣas of mercury are enumerated: nāga, vaṅga, vahni, mala, cā-

palya, garala, giri, and asahyāgni (2.3), and seven kañcukas: bhedī, drāvī, malakārī, dhvāṅkṣī, parpatīkā, andhakārī, and pāṇanīkā (2.6). Eight saṃskāras are said to suffice for rasāyana purposes and described: svedana, mardana, mūrchanā, utthāpana, the three varieties of pātana, bodhana, niyāmana, and pradīpana (2.17–59). Anuvāsana is not mentioned. Māraṇa (killing) and the properties of bhasman are dealt with in a few verses (2.60–63).

Fifteen uparasas are distinguished, divided into a superior and an inferior group. The ten superior uparasas are: darada (cinnabar), rasendu (= rasakarpūra), gandha (sulphur), abhra (mica), (manaḥ)śīlā, tālaka, dugdhapāśāṇa, kampilla, sphaṭika, and ṭaṅkaṇa; the five inferior uparasas are: śīlājatu, bola, saurāṣṭrī, khaṭī, and gairika (2.67–68); capala is either regarded as a mahārasa or an uparasa (2.69).

Rasakarpūra is of two varieties; it is a product of mining (khanija) or made in the workshop (kṛtrima) (2.78). Four varieties of sulphur are mentioned: red, yellow, white and black (2.85). Mica is of four colours: black, yellow, white and red; these types are called vajra, grāhika, tāra and bhīruka; the vajra type is subdivided into varieties called pināka, dardura, nāga and vajra (2.92–94).

Sixty-four drugs, mostly plants, used in the killing of mica, are listed (2.111–116). The preparation of abhrakasattva is not described. Manaḥśīlā is of three varieties: śyāmāṅgī, karavīrikā and dvikhaṇḍā (2.123–125). Four varieties of haritālā are distinguished: piṇḍākhyā, pattrasaṃjñikā, godanta and vakadāla (2.133). Ṭaṅkaṇa is of three types: sphaṭikābha, guḍaprabha and pāṇḍura; the last type is also known as nīlakaṇṭha (2.173–174). Four kinds of śīlājatu are described: suvarṇa-, rājata-, tāma- and āyasaśīlājatu (2.181–183). Bola is of three kinds: rakta, śyāma and manuṣyaja (2.196). Two varieties of gairika are described: pāśāṇagairika and svarṇagairika (2.206). Capala is of four colours: gaura, śveta, aruṇa and kṛṣṇa (2.211–214).

The three types of iron, muṇḍa, tīkṣṇa and kānta, are mentioned without any subdivision (2.293). Zinc (yaśada) is of two varieties: yaśada and śavaka (2.335). Lead (nāga) is of two kinds: kumāra and samala (2.356). Kāṁsya is of two kinds, called puṣpa and tailaka (2.393–394). Only two kinds of añjana are distinguished: sroto'ñjana and suvīraja (2.493). Two varieties of kañkuṣṭha are described: nalikākhya and reṇuka (2.498). Kāṁsī is of two kinds: cūrṇa- and puṣpakāṁsī (2.510).

Noteworthy diseases mentioned in chapters three and five are: āhakajvara (3.203–206; 5.24–25), āmāśayaroga (3.340–341), aṁśughāta (3.1377–1379), aupasargikameha (3.944–946; 5.408), bahumūtra (3.952–974; 4.413–418), gadodvega (3.691–694), granthikajvara (5.22–23), kapharoga (3.846–859), klomaroga (3.977–979), ojomeha (3.947–948), pittaroga (3.860–864), pretajaroga (3.1604–1606), śīrṣāmburoga (3.1373–1376), somaroga (3.1405–1423; 5.615–617), urastoya (3.856–860), and vrkkaroga (3.975–976).¹⁴⁶

The author

The author introduces himself in the granthakāraparicaya, appended to chapter five. His name is Viśvanātha Śarman, of a brāhmaṇa Dvivedin family, of Vatsagotra. His parents are Pārvatī Devī and Hanumān, who lived in the village Duvaulyā in the Naravanamaṇḍala, in the vicinity of Kāśī.¹⁴⁷

Date

The *Rasendrasambhava* was completed in 1952/53.¹⁴⁸

The *Rasendrasārasaṃgraha*

The *Rasendrasārasaṃgraha* by Gopālākṛṣṇa¹⁴⁹ deals with alchemy in the service of medicine and contains, in particular, a large number of rasayogas against various diseases.

Contents¹⁵⁰

The treatise consists of 2,167 verses, arranged in five chapters (adhyāya), and is based on earlier works.¹⁵¹

Chapter one (386 verses) deals with: the names and characteristics of mercury (7–9), its blemishes (10–12), and its purification (13–18); the taptakhalla (19); the aghoramantra (20);¹⁵² rasanigaḍa (21); the purification of mercury again (22–36); ūrdhvpātana (37–38); adhaḥpātana (39–41); tiryakpātana (42–43); bodhana (44–46); mercury prepared from cinnabar (47–55); mūrchana (56–57); māraṇa (58–61);¹⁵³ rasasindūra (62–72); rasakarpūra (73–75); sarvāṅgasundararasa (76–81);¹⁵⁴ kṛṣṇabhasman (82–85);¹⁵⁵ the vajramūṣā (86–88); various groups of substances (89–108); the uses of mercurial products (109–113); the uparasas (114–115), their purification and killing: gandhaka (116–125),¹⁵⁶ vajra (127–134), vaikrānta (135–138),¹⁵⁷ abhraka (139–167),¹⁵⁸ tālaka (168–187),¹⁵⁹ (manah)śilā (188–193), kharpara (194–196), śikhitūṇḍa (= tuttha; 197–201), vimāla (202–204), (hema)mākṣika (205–213),¹⁶⁰ kāśīśa (214–215), kāntapāṣaṇa (216–219), varāṭa (220–224), añjana (225), hīṅgula (226–231), gairika (232–237), śaṅkha (243–244), bhūnāga, ṭaṅkaṇa (238–242), and śilājatu (232–234); the purification of kaṅkuṣṭha is also dealt with in the verses on the uparasas (235–237); the purification of bhūnāga, although listed as one of the uparasas (114–115), is not discussed; the purification and killing of the metals and alloys (245–357): gold (245–258), silver (259–267), copper (268–278), brass (pittala) and bronze (kāṃsya) (279), lead (280–287), tin (288–295), iron (296–352), maṇḍūra (353–357); the purification and killing of gems (358–364); the purification of the major poisons (viṣa; 365–369),¹⁶¹ the minor poisons (370–371), and some other substances (jayapāla, snuṭīkṣīra, the seeds of vṛddhadāraka, nimbu, rājavarṣka, etc.; 372–374 and 378–386); the purification of leeches (375–377).

Chapter two begins with a number of rasas which are effective against many diseases. The remaining part of chapter two, which is very long, consists of forty-nine sections, devoted to the treatment of one or more diseases, mainly with rasayogas.¹⁶² Chapter three contains rasas against children's diseases and chapter four against poisoning. Chapter five is devoted to rasāyana and vājīkaraṇa.

The order of the diseases agrees largely with the *Mādhavanidāna*, except for some additions.

Authorities mentioned in the *Rasendrasārasaṃgraha* are: the author of the *Candrikā* (1.74–75 and 76–81), Caraka,¹⁶³ the author of the *Rasamañjarī* (1.74–75), and Nāgārjuna (1.43).

The *Rasendrasārasaṃgraha* is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, the *Bhāvaprakāśa*,¹⁶⁴ the *Rasadhātuprakāśa*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hanumatprasāda Śarmā's commentary on the *Siddhabhaiṣajyamañjūṣā*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Hariśaraṇānanda's *Kūṭīpakvarasanirmāṇavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Jñārasarāmaśarman's *Anupānadarpaṇa*, the *Śāligrāmanighaṇṭubhūṣaṇa*, Khare's commentary on the *Rasaratnasamuccaya*, the *Rasajalanidhi*,¹⁶⁵ the *Rasatattvavivecana*, Śivādāsasena's commentary on the *Cakradatta*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and Yādvajī Trikamjī's *Siddhayogasamgraha*. It is one of the sources of the *Bheṣajasaṃhitā*, *Pāradasaṃhitā*, *Rasavidyāmahānṛava*, *Rasayogasāgara*, *Rasendrasambhava*, *Rasoddhāratantṛa*, and Yādvajī Trikamjī's *Rasamṛta*.

A number of verses of the *Rasendrasārasaṃgraha* are also found in the *Rasaratnākara*.¹⁶⁶

The *Rasendrasārasaṃgraha* is especially popular in Bengal.¹⁶⁷

Special features

The plants belonging to the *niyamakagaṇa* are: ākḥuparṇī, anantā, balā, brahmaṇḍī, cakramarda, ghanadhvani, ghaṇṭā, girikarṇikā, gojihvā, jālinī, kākajaṅghā, kākamācī, kañcukī, karañjaka, kokilākṣa, kṣṇavarṇatulasī, kṣīrīṇī, mahābalā, maṇḍūkapaṇī, matsyākṣī, meṣāśṛṅgikā, mūrvā, nāgabalā, nīlī, padmacāriṇī, pāṭhā, potikā, punarnavā, saḥacarā, saḥadevī, śaṅkhaṇḍapustī, śarapūṅkhā, sarpākṣī, śatāvarī, śikhaṇḍī, simhī, tāmalakī, tripuṭī, vanyakarkoṭī, vighaṇṭā, viṣṇukrāntā, and yamaciñcikā (1.89–93).¹⁶⁸

The plants and substances belonging to the *mārakavarga* are:¹⁶⁹ ākḥuparṇī, arka, asanaka, balā, bhallātaka, bhekaparṇī, cakra, cāṇḍālīnī, candrarekhā, citraka, dantikā, devadālī, dhustūra, dūrvā, ghana, girikarṇikā, gokaṇṭaka, gokṣura, guḍūcī, haṃsapadī, hastiṣuṇḍikā, the two kinds of haridrā, harītakī, hingu, indravāruṇikā, jāti, jayantī, kākajaṅghā, kākamācīkā, kañcukī, kanyā, karkaṭī, kaṭutumbī, kiṃśuka, koṣātakī, lajjā, lākṣā, lāṅgalikā, mahārāṣṭrī, māṇa, mārkava, matsyākṣī, mūrvā, muṣalī, nīpakaṇā, nirguṇḍī, the two kinds of punarnavā, rambhā, ravibhaktā, saḥadevī, saindhava, saraṇī, śarapūṅkhā, sarpākṣī, śatāvarī, śīgru, somalatā, śuṇṭhī, śvetasarṣapa, tila, tulasī, vacā, vajravallī, vajrī, vandhyā, vārāhī, vargalatā, vāyasatuṇḍī, viṣamustī, viṣṇukrāntā, vyāghrapadī, and yamaciñcikā (1.94–101).

The series of *uparasa*s (1.114–115) is the same as that found in the *Rasaratnākara* (1.5.1–3). The extraction of the essences (*sattvapātana*) of the *uparasa*s is not discussed. The only *añjanas* mentioned are *nīlāñjana* (1.225) and *sauvīra* (1.235).

The plants comprising the *abhrakamārakagaṇa* are: ākḥuparṇikā, arka, bhṛatī, hila-mocikā, madana, maṇḍūkapaṇī, nāgavallī, punarnavā, tagara, taṇḍulīyaka, and tiktā (1.160).

The drugs belonging to the *triphalādigaṇa* are used in *puṭapāka* (1.319–322); their names are: auśadha, bhallātaka, bhekaparṇikā, bhṛṅga, citraka, the leaves of dāḍima, dantī, giriśāntanaka, gojihvā, hastikarṇipalāśa, kanda, kaṭukī, keśarājaka, khaṇḍitakarṇa, krāmaka, kuliśa, kuṭhāra, lohamāraka, māṇa, punarnavā, śataputrī, śṛṅgavera, tālamūlikā, tantra, triphalā, trivṛtā, vīḍaṅga, vṛddhadāra, vṛṣapattraka, and

vṛścīra.

The eraṇḍadigaṇa (1.323–324) cures vāta disorders; this group consists of drākṣā, eraṇḍa, ketakī, māṣaparnī, muḍgaparnī, prasāraṇī, śārīvā, śirīṣa, and vidārīkanda.

The kirātadigaṇa (1.325) is useful against pitta disorders; it consists of amṛtā, caṇḍana, jaṭā, kirāta, kustumburu, nimba, padma, paṭola, śālmali, śatāvarī, and uḍumbarī.

The śṛṅgaveradigaṇa (1.326–327), effective against kapha disorders, comprises arkaparna, kaṇṭakārikā, the two kinds of karaṇja, the seeds of kuṭaja, mūrvā, nirguṇḍī, paṭola, śirīṣaka, śobhāñjana, the rhizome of śṛṅgavera, and varuṇa.

The gokṣuradigaṇa (1.328), employed against disorders caused by a combination of vāta and kapha, is made up of gokṣura, kṣuraka, the two kinds of siṃhapucchī, sthīrā, and vyāghrī.

The paṭoladigaṇa (1.329), which cures disorders caused by a combination of pitta and kapha, consists of aparājītā, indīvara, kahlāra, kāntā, kāsamarda, lodhra, the leaves of paṭola, uśīra, and vārāhī.

The kiṃśukadigaṇa (1.330–331) cures disorders brought about by the three doṣas, if the drugs are prepared by means of puṭapāka; the group is made up of agnimantha, bilva, bhṛhatī, kaṇṭakārī, kāśmarī, kiṃśuka, pāṭalā, śālaparnī, the two types of siṃhapucchī, sthīrā, śyonāka, trikaṇṭaka, and viśva.

The śatāvaryādigaṇa (1.332), useful in vājīkarman, consists of balā, bhṛṅgarāja, dhātrī, gokṣura, guḍūci, kaṇā, kṣura, śatāvarī, vānarī, vidārī, vājigandhā, and vṛddhadāraka.

The vidārīkandadigaṇa (1.333–335), useful for puṭapāka, consists of amṛtakā, bhallāta, bhṛṅgarāja, citraka, karikarṇapālāśa, keśarāja, kṣīrakañcuka, madhuka, muśalī, muṇḍirī, piṇḍāhva, vidārīkanda, and śatāvarī.

Seven upaviṣas are enumerated: ahiphena, arka, dhustūra, guṇjā, karavīraka, lāṅgalī, and sehuṇḍa (1.370).

Zinc is not mentioned as one of the metals.

Some unusual names of yantras mentioned are keśayantra (1.373) and raudrayantra (1.374).

Diseases added to those described in the *Mādhavanidāna* are: jvarātīsāra, saṃgrahagrahaṇī (grahaṇī 21), bhasmaka (ajīrṇa 100), śītavāta (vātavyādhi 56), kapharoga, pitaroga, somaroga and mūtrātīsāra,¹⁷⁰ plīhan, agramāṃsa and yakṛt,¹⁷¹ and snāyuka or tantukākhyā.¹⁷² Diseases omitted are vṛddhi, vidradhi, vraṇa, bhagna, and śūkadoṣa. Phiraṅga is not mentioned.

Interesting names of plants are: ākarakarabha (upadaṃśa 24), amlarolī (1.179; ajīrṇa 101), bhaṅga (grahaṇī 23), gandhālikā (sūtikā 28), kālā (amlapitta 24), kālamāriṣa (amlapitta 20), kañcaṭa (grahaṇī 19), khaṇḍakarṇa (grahaṇī 106; kāsa 3; śītapitta 8), manyumaṇī (udāvarta 1), nāgadā (jvara 100), nisindhu (jvara 100), raṇḍā (somaroga 10), and viṣakaṇṭhālikā (jvara 100).

A large number of the formulae are ascribed to (semi-)divine and other authorities.¹⁷³ Many prescriptions are also found in the *Rasendracintāmaṇi*.¹⁷⁴

The author

The author mentions his name, Gopālakṛṣṇa, in the introductory verses.¹⁷⁵

Date

The *Rasendrasārasaṃgraha* is later than the *Rasamañjarī* which is quoted. It would be earlier than the last quarter of the fifteenth century, the period of Śivādāsasena, if this commentator's single quotation from Gopālākṣṇa's work would prove to be genuine.¹⁷⁶ The *Rasendrasārasaṃgraha* antedates the *Bhāvaprakāśa* in P.V. Sharma's opinion, who claims¹⁷⁷ that the latter cites the former; this assertion, however, cannot be substantiated. Gopālākṣṇa's descriptions of the preparation of rasasindūra (1.62–72) and rasakarpūra (1.73–75) throw doubt on an early dating of the *Rasendrasārasaṃgraha* and may point to the fifteenth or sixteenth century as the period of composition.¹⁷⁸ The quotation from a rasaśāstra author called Mādhava in Gopālākṣṇa's auto-commentary even suggests, if the remark derives from the *Āyurvedaprakāśa*, that the work belongs to the eighteenth century.¹⁷⁹

Commentaries

Commentaries on the *Rasendrasārasaṃgraha*¹⁸⁰ were written by Gopālākṣṇa himself, Rāmasena, Jīvanandavidyāsāgara, and Ambikādattaśāstrin.

An unspecified *Rasendrasāravākyā* is quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

Gopālākṣṇa's auto-commentary is called *Bālabodhinī*.¹⁸¹ Gopālākṣṇa gives many details concerning the processes described in his treatise. Vernacular names of inorganic substances and plants are rather often mentioned. The sources of quotations are not specified in most cases.

The introductory verses indicate that a ṭippanī, called *Candrikā*, on the *Rasendrasārasaṃgraha* already existed at the time Gopālākṣṇa decided to write his auto-commentary.

Authorities and works quoted and referred to are: *Agniveśasaṃhitā* (1.114 = ed. i, 1.232–233), Bhaṭṭa (grahaṇī 14 = ed. i, 65–67; kuṣṭha 11 = ed. i, 26–33), Candrikākāra (jvara 89 = ed. i, 297–300),¹⁸² Hārīta (1.114 = ed. i, 1.232–233), Mādhava (jvara 89 = ed. i, 297–300),¹⁸³ *Mṛtyuñjayatantra* (1.120 = ed. i, 1.245–247), *Pātañjala* (1.151 = ed. i, 1.296), *Siddhasāra* (jvarātisāra 1–2 = ed. i, 1–4), Someśvara (jvara 4 = ed. i, 4–15; jvara 73 = ed. i, 219–221),¹⁸⁴ *Śrīkaṇṭha* (jvara 73 = ed. i, 219–221), and Vāgbhaṭa (1.114 = ed. i, 1.232–233).

The commentator Rāmasena, called Kavīndramaṇi,¹⁸⁵ was the court physician of Mīr Jāfar, the Nawab of Bengal (A.D. 1757–1762); he also commented on the *Rasendracintāmaṇi*. Rāmasena is quoted in Jīvanandavidyāsāgara's commentary.

Jīvanandavidyāsāgara's commentary¹⁸⁶ quotes from and refers to: *Agniveśasaṃhitā* (1.233), *Arthabodhikā* (jvara 340),¹⁸⁷ *Atrisaṃhitā* (1.66, 127, 130), (Govindadāsa's) *Bhaiṣajyaratnāvalī* (śūlaroga 29–34; śītāpitta 8; bālaroga 8; rasāyana 54), Bhānudāsa (pittaroga 3), Bhaṭṭa¹⁸⁸ (grahaṇī 65; ajīrṇa 79; kuṣṭha 47), Bhāvamiśra (1.64), *Bhāvaprakāśa* (kuṣṭha 47), *Cakradatta* (śoṭha 6), (Śivādāsa's) *Cakradattaṭīkā* (1.232), Candrikākāra (jvara 297), Caraka (unmāda 14), Dīpikākāra (jvara 340), Hārīta (1.233), Mādhava (jvara 297,¹⁸⁹ jvarātisāra 1),¹⁹⁰ *Mṛtyuñjayatantra* (1.245–247),¹⁹¹ *Nāgārjunī-*

yasiddhaprayogatantra (jvara 340–350), *Niścāla* (amlapitta 19–31), *Rājānighaṇṭu* (1. 64 and 245–257), *Rāmasena* (1.65; śūla 4 and 65), *Siddhasāra* (jvarātisāra 1–2), *Someśvara* (jvara 2.4–15 and 219), *Śrīkaṇṭha* (jvara 219), *ṭīkā* (ślīpāda 2), and *Vāgbhaṭa* (1. 233).

Jīvānanda repeatedly mentions variant readings¹⁹² and vernacular, especially Bengali, names of plants.¹⁹³

Ambikādattaśāstrin's commentary¹⁹⁴ quotes from and refers to: *Bhaiṣajyaratnāvalī* (upadaṁśa 5–21; rasāyana 65–74), *Bhāratānuśāsanika* (1.248), *Bhāvaprakāśa* (1.259, 279, 296, 326–327, 353–354, 372–373; kuṣṭha 47; masūrīkā 1), *Cakra* (yonivyāpad 2), *Caraka* (gulma 2–3; kuṣṭha 48–57), *Jejjāṭācārya* (upadaṁśa 1–2), *Kumāratantra* (bālaroga 6–12), *Manusaṁhitā* (1.248), *Mātrkābhedaṭantra* (1.248), *prācīnatīkā* (ślīpāda 1–6), *Rājānighaṇṭu* (1.296, 358), *Rasaratnasamuccaya* (1.126, 129–130, 168, 225, 232, 259, 296, 357, 358), *Rasatarāṅgiṇī* (1.49–50, 126, 140–145, 257–258, 353–354, 357, 380–386; ajīrṇa 25–28; rasāyana 75–77), *Suśruta* (1.365; yakṣman 14–19; yonivyāpad 2), *Vāgbhaṭa* (1.365; yakṣman 100–107; hikkāśvāsa 1–2), and *Vāgbhaṭatīkā* (pāṇḍuroga 50–52).

The *Rasoddhāratantra* or *Rasasaṁhitā*

The *Rasoddhāratantra* or *Rasasaṁhitā* is an iatrochemical treatise in Hindī prose and Sanskrit verse, composed by Carāṇatīrtha Mahārāja, i.e., Jivṛām Kālidās.¹⁹⁵

Contents

The work deals with the origin, symptoms and treatment (mainly by means of rasayogas) of diseases.

The *Rasoddhāratantra* is based on the following sources: *Aṣṭāṅgaḥṛdaya*, *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bṛhannighaṇṭuratnākara*, *Cakradatta*, *Caraka*, *Gadanigraha*, *Rasakāmadhenu*, *Rasaprakāśasudhākara*, *Rasarājasundara*, (Nityānātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrasārasaṁgraha*, *Śāringadharasaṁhitā*, *Suśruta*, *Vaidyājīvana*, *Vaṅgasena*, *Vṛndamādhava*, *Yogarātnākara*, and *Yogatarāṅgiṇī*. Additional sources referred to are the *Bṛhadयोगatarāṅgiṇī* and *Yogaśataka*.

The treatise ends with the bhasmapīṣṭiprakaraṇa of a Sanskrit version of the *Rasoddhāratantra*, accompanied by some comments in Sanskrit.¹⁹⁶ This section is concerned with the preparation and medicinal uses of the bhasman and piṣṭi of the following metals, minerals and other substances: akīka (1–4), abhraka (5–18), abhrakasattva (19–28), kāntapāśāṇa (29–32), kāntaloha (33–47), kāsīsa (48–51), kāsīsa and godantī (52–54), kukkuṭāṇḍatvac (eggshells; 55–56), kāṁśya (57–62), kharpara (63–66), godantī (67–69),¹⁹⁷ gomeda (70–73), caturvaṅga (74–79),¹⁹⁸ jaharamoharā (80–85),¹⁹⁹ tāmrā (86–97), tuttha (98–100), trivaṅga (101–105),²⁰⁰ trṇakāntamaṇi (106–109), nāga (110–115), indranīla (116–129), marakata (130–142), pittala (143–148), puṣparāga (149–157), pañcaloha (158–167), pravāla (168–175), vaṅga (176–181), mayūrapicchā (peacock's feathers; 182–185), gaurīpāśāṇa (186–

192), māṇikya (193–199), mākṣikasattva (200–204), muktā (205–221), maṇḍūra (222–226), mrgaśṛṅga (deerhorn; 227–234ab), yaśāda (234cd–240), rajata (241–250), loha (251–255), lohābhra (256–259ab),²⁰¹ varāṭikā (259cd–265), vajra (266–272), vaikrānta (273–276),²⁰² vaiḍūrya (277–286), śukti (287–288), śaṅkha (289–294), saptaratna and navaratna (296–310), suvarṇa (311–315), svarṇamākṣika (316–323), saṅgeyaśāba (324–327),²⁰³ sphāṭika (328–332),²⁰⁴ haritāla (333–334), and hiṅgula (345–349).

Sources quoted or referred to in this section are: *Āyurvedaprakāśa*, *Bṛhadyogataraṅgiṇī*, *Govindapādāh*, *Rasaprakāśasudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Yogarātnākara*.

The *Rasopaniṣad*

The *Rasopaniṣad*²⁰⁵ is an anonymous alchemical treatise that is mainly concerned with the transmutation of base metals into gold and silver by means of processed mercury (lohasiddhi); rasāyana and dehasiddhi are important subjects in the last few chapters.²⁰⁶

The *Rasopaniṣad* is composed in the form of a conversation between Śiva and Pārvaṭī. The work may have formed part of a larger work, called *Mahodadhi*, unless *Mahodadhi* be an alternative title of the *Rasopaniṣad*.²⁰⁷

Contents

The *Rasopaniṣad* has been incompletely preserved,²⁰⁸ as appears from a table of contents found in chapter one (1.20–84), which gives an analysis of the contents of chapters one to eighteen, followed by information on the topics dealt with in chapters twenty-four to thirty; verses on chapters nineteen to twenty-three are missing. The edited part of the treatise consists of about 2,500 verses and some prose.²⁰⁹

Chapter one (rasakaraṇabandha; 119 verses) is concerned with śodhana, tejana, pācana, dāśana, cāraṇa, and pātana (which constitute the sixfold rasakarman), nigrāha, bandhana, āṅkuśa, pakṣaccheda, agnikarman, rasakriyā, rañjana, krāmaṇa, sārāṇa, pratīśārāṇa, and saṅkarabandha.²¹⁰

The subjects of chapter two (rasavṛddhikaraṇa; 42 verses) are bandha and drāvāṇa,²¹¹ those of chapter three (sparśavṛddhikaraṇa; 30 verses)²¹² are sattvapātana, āṅkuśabandha, āṅkuśanipātana,²¹³ and sparśavedhiraśa.²¹⁴ Chapter four (bījavadhāna; 121 verses) deals with bījas and their uses in rañjana, with groups of substances (varga), and with the dīpikā(yantra).²¹⁵ Chapter five (vedhapātta; 14 verses) is concerned with the paṭṭabandha of mercury by means of jyeṣṭha- and madhyamabīja.²¹⁶ Chapter six (lohakaraṇa; 59 verses) discusses the sattvapātana of rasaka (6.3–19) and other substances: mākṣika, vimāla, śāila, capala, and sasyaka.²¹⁷

The subjects of chapter seven (rañjanakalkavidhi; 79 verses) are pakṣaccheda, loharañjana (in particular the colouring of lead and tin, which makes them resemble gold), and the preparation of bījas, viḍas, and other substances.²¹⁸ Chapter eight (golakavidhāna; 18 verses) describes the preparation of two kinds of golaka (a variety of baddha mercury), used in transmuting other metals into gold.²¹⁹ Chapter nine

(auśadhibandhana; 14 verses) is about the bandha of mercury by means of plant juices and about bījaṛaṅjana.²²⁰ Chapter ten (nāgasamkramaṇa; 13 verses) is about the samkramaṇa (i.e., the raṅjana and bandha) of mercury by means of nāga and vaṅga.²²¹ Chapter eleven (tārotkarṣavidhāna; 24 verses) about tārotkarṣa (the colouring of silver, which makes it resemble gold) and the six types of kūrpa, which remove impurities.²²² Chapter twelve (śulbārakālikāccheda;²²³ 77 verses) is concerned with the removal of the impurities (kālikāccheda) left in copper (śulba) and brass (āra).²²⁴

Chapter thirteen (vaṅgastambhaśodhana) gives an account of the stambha (i.e., bandha) of mercury by means of vaṅga.²²⁵ Chapter fourteen (śodhanavidhi; 47 verses) describes bhāvana, garbhadruṭi, guṭikās, etc.²²⁶ The subjects of chapter fifteen (abhrakadrāvākādhikaraṇa; 251 verses) are the drāvaṇa, i.e., druti, of mica, its cāraṇa and jāraṇa, the preparation of surā, viḍas, and the processes called sārāṇa, krāmaṇa and vedha.²²⁷ Chapter sixteen (drāvaṇādhikāra; 289 verses) describes the drāvaṇa of dhātus, upadhātus, ratnas, etc.²²⁸ Chapters seventeen (guhyabandha; 616 verses) and eighteen (rasakaraṇabandhasaṃnyāsavidhāna; 720 verses) are concerned with the making of gold and silver, mercurial preparations for purposes of rasāyana and dehasiddhi, plants useful for particular alchemical operations, etc.²²⁹

By far the majority of the verses are ślokas. Long metres and an ornate style are found in particular in chapters seventeen and eighteen (17.138–148, 531–535, 593–603; 18.387–413).

The *Rasopaniṣad* refers to earlier works on which it is based (1.14): *Prābhṛta*-, *Vā-tula*-, *Brāhma*-, *Vaiṣṇava*-, *Aindra*-, *Śāṃkara*-, *Bṛhaspati*- and *Śaukra*(*mata*). Authorities mentioned are Māṇḍavya (18.77) and Nāgārjuna (16.10).

The *Rasopaniṣad* is quoted in the *Rasatattvavivecana*. Both *Rasopaniṣad* and *Mahodadhi*, the work on which the former is said to be based, are named in the *Bhūtiprakaraṇa* of the *Gorakṣasaṃhitā*.²³⁰

Special features

The terminology regarding the saṃskāras differs from what is found in other treatises. Two series are mentioned. The first series consists of six processes (ṣaḍvidha rasakarman): śodhana,²³¹ tejana,²³² pācana,²³³ dāśana,²³⁴ cāraṇa²³⁵ and pātana²³⁶ (1.20cd–21ab). The second series is composed of ten operations: nigrāha,²³⁷ bandhana,²³⁸ agnyaṅkuśa,²³⁹ pakṣaccheda,²⁴⁰ vahnikaṛman,²⁴¹ rasakriyā,²⁴² raṅjana, krāmaṇa, sārāṇa and pratisārāṇa (1.21cd–22). Vedha is absent from the second series, although it is a very important process in the *Rasopaniṣad*.

The impurities of mercury are enumerated in one of the later chapters (15). The kañcukas are referred to in chapter one. Their removal is accomplished by means of the pākāṣṭakavidhi (1.61–63).²⁴³ The fermented fluid called surā or saṃdhāna, used for the pakṣaccheda of mercury, is made with the juice of thirteen plants (1.78–79). The most suitable substance for the bandhana and raṅjana of mercury is lead (nāga; 2.1–2). The process called saṃnyāsa is carried out with a substance called mahāviḍa (2.19–22). The preparation of various kinds of kṛṣṭi (used in jāraṇa) is described (2.23–28). The bījas are said to be twenty-four in number (4.1–3).

Many groups of substances are listed in chapter four. Seven mahārasas are distin-

guished: mākṣika, vimala, rasa(ka), vaikrānta, sasyaka, capala and śaila (= śilājatu) (4.4), and seven uparasa: kāsīsa, añjana, kākṣī, haritāla, manaḥśilā, gairika and gandhapāṣāṇa (4.5).²⁴⁴ Seven metals, called loharasa, are enumerated (4.6);²⁴⁵ tin and lead are called pūtiloha; bronze (kāṁsa) and brass (āra) are the alloys (saṁkara; 4.7). Deva(loha), vaikṛnta²⁴⁶ and vajra are grouped together as the mahāśāras; another substance is referred to as rasaloḥa (4.8). The seven gems (maṇi) are: gomedaka, amṛtāma,²⁴⁷ śyāmā,²⁴⁸ añjanamūlaka,²⁴⁹ lohitaṅka,²⁵⁰ kūṛpa,²⁵¹ and jyotīrasa²⁵² (4.9–10ab). The seven salts comprise saindhava, romaka, sāmudra, biḍa, cūlikālavana, kṛṣṇasuvarcala and uṣṭī²⁵³ (4.10cd–11).

An unusual list of forty poisonous substances (viṣa) is found in chapter four, as well as a list of eighty minor poisons (upaviṣa). The forty major poisons (mahāviṣa) are: amṛta, āyudhapātana, bilva, chidrāṅga, citraka, duḥkha, ghora, ghūrṇaka or cūrṇaka, hālāhala, kālāhva, kālakūṭa, kāṇḍa, karkaṭa, kīṭaghna, madavihvala, madhusiddha, maṇḍa- or muṇḍamūla, māraka, markāṭa, māruja, mūlaka, nāgara, nārāca, nirjīva, paṇḍara, parpaṭa, paṇḍara, pītamustaka, prāṇavardhana, romanāśana, rudhirasaṁbhavadoṣa, rūkṣa, saktuka, suksīra, tamoghnabīja, tīkṣṇa, ugra, vaṭodumbarasaṁkāśa, vatsanābha, and viṣa (4.12–17ab). The eighty minor poisons are: agnimanthaka, ākhumāraka, akṣa, aṅkola, arka, bhallātaka, bilva, brahmasomā, cakramardaka, ciribilvaka, citraka, dhātī, dvīpā,²⁵⁴ gandharvavāruṇī,²⁵⁵ gāṅgeyī, guṇḍī, hastivallī,²⁵⁶ iṅgudā, kābukī,²⁵⁷ kākajaiṅghikā, kandakī,²⁵⁸ kaṇika,²⁵⁹ kāraka,²⁶⁰ karavīra, karṇika, kaṭuka, kaṭukālābu, kaṭuvetasa, kohala,²⁶¹ the two kinds of koṣātakī, kūṇḍa, kūṭaja, lāmbukā, lāṅgalī, lodhra, madanā, madanakodrava,²⁶² mohanā, nāgāhvā, nicula, nimbakī, niśācarī,²⁶³ palaṇḍuka, palāśa, pāṭhā, pīlu, piṇḍālu, the two kinds of pippalī, priyālu, pūtika, śabara, sahā, śaivala, śāka, śīgru, śirṇha, śirīṣa, śleṣmātakī, snuhī, śuka,²⁶⁴ śukanāśā²⁶⁵ sūraṇa, suvarcalā, svayaṁguptā, syanda, taptasūdana, trivṛtā, unmattā, uttamā,²⁶⁶ vacā, vajra, vajrakanda, vajravallī, vajrī, vandāka, vāśā, vāyu, and vyāghāta (4.17cd–26ab).

Other groups enumerated are the drāvaṇāṅga (4.26cd–28ab), raktavarga (4.28cd–29), amlagaṇa (4.30–31), bījavarga (4.32–33), surāvarga (4.34), pittavarga (4.39cd–40ab), a second raktavarga (4.40cd–42ab), and the viṣṭhāvarga (43–44). The items belonging to the drāvaṇāṅga are the animals called bheka (a frog), citrāṅga, dvimukhī, indragopaka, ṣaḍbindu, mātṛvāha, maṇḍalī, and gopamaṇḍalī, the plants called kharjū and rāmaṭha, and taṅkaṇa.

Chapter four describes the way to prepare the following substances: mahācūrṇa (4.48–50), nāga-, vaṅga-, tāma- and mārāmākṣika, nāga-, vaṅga-, rakta- and mārāhāṭaka (4.73–80),²⁶⁷ dvī-, tri- and caturhāṭaka (4.82);²⁶⁸ vimala may be used as a substitute of mākṣika (4.94–95) in the preparation of related substances. The mahāśāras are described: vimala and mākṣika (4.93cd–95), rasaka (4.96–100ab), sasyaka (4.100cd–108ab), capala (108cd–112ab), and śaila (4.114cd–115ab). Three types of śaila are mentioned (4.114cd–115ab).²⁶⁹ The number of bījas is said to be one thousand according to some authorities, five hundred according to others; the best among the ācāryas, however, take them to be 210 in number (4.117cd–118ab). The best varieties of rasaka are those found in Ahicchattra and Aihikāpātha (6.4).

Chapter seven describes a kind of gold called caturthasāra (7.55–56), which re-

semples mātṛkā.²⁷⁰ The term kūṛpa is explained in chapter eleven; kūṛpa is said to be sixfold and to consist of dāśana, pāśana, śodhana, mārdaṇa (= mṛdūkaraṇa), bodhana and rañjana (11.12–18). Chapter twelve mentions types of gold called mātṛkottara (12.25)²⁷¹ and hemaśaṣṭha (12.26).²⁷² The preparation of alloys of brass and gold is also described (12.59ab and 68ab). Chapter thirteen describes the purification of tin in a mixture of acidic and alkaline fluids.²⁷³

Chapter fifteen enumerates eight innate (sahaja) mahādoṣas of mercury: kṣṇatva (blackness), pakṣikā, sneha, the inability to fuse with (saṃkrama) metals, vepathu (= cañcalatā), sparśasaṃkrānti, bhuktamokṣa (vomiting of the grāsa), and saśabdatā (15.55–56). It also lists six avasthās of mercury: puṭasaha (able to withstand the heat of puṭa), lepasaha, andhamūśāsaha (able to withstand the heat in the mūśā), saraṇasaha, the absence of loss in weight (kṣaya) after liquefaction (druti), and lohāvarta (15.58–59). The six avasthās during abhṛakacāraṇa are: bhṛama, bhaṅgasthiti, kampa, jalūkā-bandha, kākaviṣṭhā, and piṇḍa (15.88);²⁷⁴ the six doṣas are: pārśvagrāhin, pucchagrāhin, grasita, veṣṭita, mūrchaka, and hīṃsaka (15.89). The characteristics of mercury after jāraṇa of abhṛaka are: kapila(varṇa), anucara, niḥśabda, anyadarśaka, akṣiṇa, and agnisaha (15.91). The six characteristics of rasājīrṇa are enumerated (15.92). Mercury is said to be baddha when the seven gatis are absent (15.97).²⁷⁵ The preparation of various types of surā (15.160cd–162 and 238–251) and of a number of viḍas is described (15.198–235).²⁷⁶

The best type of mākṣikā is found near (the river) Tāpīyāsi²⁷⁷ (16.1). A process is described, called lakṣmīpatikriyā, which turns silver into gold (16.2–6ab). Another process, which makes copper assume properties of silver, is ascribed to Nāgārjuna (16.6cd–10). Another process again, transmuting copper into gold, is carried out by help of small pebbles of the size of grains of pepper, which contain gold; these pebbles are found in the neighbourhood of a village called Prīti, situated in Kerala, not far from the coast (16.11–17). Some more methods to make gold by means of these pebbles are added (16.18–27).

Chapter sixteen contains a vaikṛntakalpa (16.28–77ab).²⁷⁸ Vaikṛntaka is said to be found near the river Vikṛntā,²⁷⁹ in a country called Valkala.²⁸⁰ The usefulness of vaikṛnta in a number of alchemical operations is delineated.²⁸¹ Seven varieties of vaikṛnta, each variety having a distinct colour (16.78–79ab), are described,²⁸² together with their uses (16.79cd–100ab). More uses of vaikṛnta are dealt with in the prose passage that follows. This passage also enumerates a series of regions where vaikṛnta is found: Meḍhapāṭa,²⁸³ Svāta, Vairāṇanagara, Nepāla, Camūraṇa,²⁸⁴ Kāśmīra, Āndhradeśa, Śrīparvata,²⁸⁵ Dramiladeśa, and Karahāṭṭa.²⁸⁶ The same prose passage deals with deva-loha, a mahārasa found near a Śiva temple in the neighbourhood of Rāśina, a village in the Śeṣaṇa region of southern India; this substance comes forth spontaneously from the pātāla (a region under the earth) during thunderstorms in the early raining season and is also found in mines. The verses following upon the prose give an account of the wonderful actions of this deva-loha, used for rasāyana and for vedha of all the metals (16.101cd–137ab). The next section of chapter sixteen is concerned with agni-jāru,²⁸⁷ a substance deriving from the jāryu of marine animals; it resembles deva-loha in being sparśavedhin, i.e., it turns base metals into gold or silver by its mere touch. Agni-jāru

should not be handled with one's hands, but with an aṅkuśa (hook) only. Five varieties are described, called after five birds: pārāvata, haṁsa, cakravāka, agnika and śuka (16.137cd–185).²⁸⁸ The remaining part of the chapter is devoted to druti of the metals.

Chapter seventeen is about guhyabandha, a process to be carried out with the assistance of a suitable woman, selected for this purpose. The characteristics that should be present in this woman and her male partner are described (17.3–9), followed by the guhyabandha, revealed by Umā, who received her knowledge from Īśvara (i.e., Śiva); the product of this complicated process is suitable to aurification (17.15–26). The next subject is cāraṇa; the plants employed in this process are listed (17.37–38). The preparation of a pāratiya rasendra, called amṛta, is dealt with; this substance is endowed with a long series of miraculous actions. A mythological story about the appearance of various substances during the churning of the ocean and the ensuing great battle is inserted (17.63cd–74). The proper way of using mercurial products (rasa) and the results obtained²⁸⁹ are explained (17.75–116). The symptoms of improperly assimilated (aṅgīma) rasas are given, together with the treatment of this type of disorder (17.117–129), followed by the proper behaviour after the ingestion of mercurial products (17.130–137). The wonderful effects of rasas are colourfully described in elegant verses in long metres (17.138–148),²⁹⁰ followed by the preparation of pathyāgūḍa and other rasāyanas (17.149–188), and a ritual to be performed (17.189–208).

A large series of plants employed in various alchemical processes, called jatharagrāhī or jatharagrāhīmūlī, is described (17.210cd–240),²⁹¹ followed by those called piṇḍagrāhī or mahauśadhi (17.241–300). These lists are preceded by an agnimantra.

The remaining part of the chapter is filled with processes resulting in the production of artificial gold and silver.

The jatharagrāhī and piṇḍagrāhī plants²⁹² are: ādityavallī (220), agnivr̥kṣa (300), aṅamārī (300), āmr̥takī (228), am̥sumatī (223), bhūśīrīśaka (299), bhūtakeśā (218), brahmadāṇḍa (278), brahmaṇī (294), chattrī (252), citrakapatrinī (282), deva (254), devaśrī (284), garuḍā (291), gomārī (275, 299), hemalatā (293), jyotiḥkanda (273), jyotirvr̥kṣa (273), jyotiśṛṇa (273), kesarī (235), khadirapatirikā (276), khadyotoddhulikā (275), kiṁśuka (226), kīṭamārī (288), kṛṣṇamūlī (219), kumārī (267), kuravakī (300), madhutṛṇa (278), nāginī (282), nārācī (265), naravandī (270), nīlacitraka (262), padmadāṇḍa (278), pītakodravamārī (299), raktapuṣpā (225, 300), śābarakā (253), saptaparnī (296), sārā (229), sarṣapapatirikā (300), śataparikā (227), śimhikā (290), somā (251), śrījayā (280), sthalajapadminī (259), suvarṇadāṇḍa (278), tilakapatirikā (269), triśūlī (299), vajrī (255), vanakustambarī (300), vārāhī (224), vijayā (281), and yavacarikā (299).²⁹³

Chapter eighteen is about the transmutation of various metals into gold and silver. Seventy divyauśadhis are enumerated (18.81–90), followed by plants called jatharagrāhika (18.101cd–111ab)²⁹⁴ and sparśavedhin (18.111cd–117). Numerous divyauśadhis, sparśavedhin plants and other ones are described in prose (between 18.117 and 118). The verses which follow mention series of plants which are rañjana (18.136cd–139), pāśana (18.142), dīpana (18.151cd–152), chedana (18.153cd–156ab), etc.

The seventy divyauśadhis²⁹⁵ are: adhaḥparṇī, ajamāriṇī, ajananī, ambaṣṭhikā, amṛtā, amṣumatīśikhā,²⁹⁶ analadruma,²⁹⁷ anantā, ardhaśeṣī,²⁹⁸ bhogavatī, bhūkadamba, bhūśirīṣikā, calāmadhuk(?), chattrī, daṁṣṭrīṇī, dāsīvallī, ghanamustakā, ghaṭābhra, ghoṇasī, gomārī, hutāśanataru, kākapadī, kāminī, kapilā, karavikā, karavīrakā, kumārī, kumudaprabhā, kumudī, kuraṅgī, kuravakī, kustumburu, kvāthinī, lalakambunā, marīcī, meghā, mūlī, nābhilā, nahuṣī, nāraca, naradevā, nilacitrakā, pauṇḍarikā, pītakodravamārikā, raktajihvā, raktapuṣpā, rocanā, sahasrāṁśā, samopetā, sarṣapaparnī, sarvacchedanikā, śatapuṣpī, śatruviśruti, somā, sthalapadminī, suparnī, suraktā, tālī, tejovatī, tīkṣṇā, tilakapattrikā, tridaṇḍī, trīśikhā, trīśūlī, udgatā, vajrā, vārā, viśadharā, viṣaparikā, and yakṣiṇī (18.81–90).

The jātharagrāhika plants²⁹⁹ are: abhayā, ādityavallikā, amlavetasī, āmrātakī, apāmārgā, apatrā, āpītikā, aṭavī, bhūtakesinī, brahmaputra, brahmavṛkṣa, cakramardaka, carcikā, devadālī, dhūsarā, dravantikā, ekamūlinī, gaṇḍakī, gaṇḍikā,³⁰⁰ garuḍī, hastikarnī, janitrā, jārā, kaṇṭhakālī, kaṭukā, karnikā, kesarī, ketakī, kovidārā, kṛṣṇavallikā, kṛṣṇaṅgudā, kuheṭaka, laṣunī, mahirā,³⁰¹ maṇḍūkapattrikā, mārjārapādī,³⁰² nāginī, naradevā, netrapuṣpā, nīlāñjalikā, nīlotpala, pañcaviṃśatiparikā, parājītā, pārijātakī, pātālī, pīlu, pīlupattrikā,³⁰³ pumspattrā, rājakośātakī, rasadūtīnī, reṇukā, śabarī, śamī, sārā, śigrukā, śikhā, śiṃhilāñgulikā, śrīdanī, sthalasamaṅgā, sucitriphalā, surabhī, suvarṇapuṣpī, śvānapucchā, śvetagirikarnīkā, tālī, tilakavallikā, trivṛt, vārāhī, viṣavṛkṣakā, viṣṇukrāntā, and viṣyandā (18.101cd–111ab).

The sparśavedhin plants are: amṛtāśanī, bhramarī, bhūmikadambikā, bhūmisamkocā, brāhmaṇī, devaśrī, garuḍā, gorocanā, hastimatā, hemalatā, khadyotā, kīṭamārikā, kuravakī, kuravikā, madhutṛṇa, mīnavallikā, mṛgadūrvā, mūrdhni, nīlā, padmadāṇḍā, pītamustakā, pṛthivī, rohiṇī, śākī, saptaparnī, sarṣapī, śaśakarnī, śiṃhikā, śīphā, śrījayā, śuṇṭhī, śyāmākā, tāmbūlavallī, vajranārācī, vajriṇī, vāruṇī, vijayā, and vīrā (18.111cd–117).

The divyauśadhis of the prose section between 18.117 and 118 are: adhaḥparṇī, ajamārī, amṛtā, amṛtāśanī, amṣumatīśikhā, bhogavatī, bhūmikadambikā, bhūmisamkocā, bhūśirīṣikā, chattrā, cilavallī, daṁṣṭrīṇī, dāsīvallikā, devaśrī, drumā, ekamūlī, garuḍā, ghanamustakā, ghoṇasī, gomārī, gorocanā, haranetrā, hastimatā, kākapadī, kālī, kapilā, karavīrā, kāsī, khadīrā, khadyotā, kīṭamārī, kumārī, kuravakī, kustumburu, mābalā, madhutṛṇa, marīcī, meghāśmanā,³⁰⁴ mṛgadūrvā, mūlī, mūrdhni, nāgodarī,³⁰⁵ nahuṣī, nāśinī, nīlā, nilacitrakā, padmadāṇḍā, pauṇḍarikā, pītamustakā, pṛthivī, rādhā, raktajihvā, raktapuṣpā, rohitā, sahasrāṁśā, śākī, samopetā, saptaparnī, saralā, sarṣapā, sarvacchedanikā, śatapuṣpikā, śilā, śiṃhikā, somā, śrīmūlī, śrīvījayā, sthalapadminī, śuṇṭhī, suparnī, suraktā, tāmbūlavallī, tejovatī, tīkṣṇā, tiktā, tilakadambakā, tilakapattrikā, tridaṇḍī,³⁰⁶ trīśūlī, udgatā, ūrdhvakeśī,³⁰⁷ vajrā, vajranārācī,³⁰⁸ vajriṇī, vārā, vijayā, viśadharā, viṣapavā, and yakṣiṇī.

The other plants described in the same section are: abhayā, ādityavallī, amlātakī, amlavetasī, apāmārgā, āpītikā, aruṇī, aśvatthapattrikā, aṭavī, bandhakī, bhūmipātālī, brahmaputraka, citrā, deva, devadālī, dhūsarā, dhuśrutā(?), dravantī, ekamūlikā, gaṇḍikā, garuḍī, hastikarnī, heṭaka, janitrā, jārā, kākamācī, kalīnarā, kandakī, karnīkā, kaṭukā, kesarī, keśī, ketakī, kovidārī, kṛṣṇaphala, kṛṣṇavallī, kṛṣṇaṅgudā, laṣunī, maharā,³⁰⁹ nāḍī, nāginī, netravṛkṣā, nīlāñjalikā, nīlotpalā, parājītā, pārijātakī, pī-

lupatirikā, pīluvrkṣa, rājakośātakī, rasadūtī, reṇukā, śabarī, śamī, sārā, śataparvan,³¹⁰ śikhā, śirphīlāṅgulikā, śrīmatī, sthalasamaṅgā, surabhī, suvarṇapuspī, śvānapucchā, śvetagirikarnikā, trivṛt, vārāhī, vastuvallī, viṣavṛkṣakā, viṣukrāntā, and viṣyandī.

Metal ores (18.464–481, mixed with prose) and the extraction of the metals from them are also described.

Some interesting terms employed in the *Rasopaniṣad* are: aravindaka (4.118),³¹¹ ariṣṭaka (12.70),³¹² aśmanṛpa (7.26),³¹³ bhūpa (12.68),³¹⁴ campaka (4.118),³¹⁵ chidra-yantra ((6.9; 16.15 and 198),³¹⁶ ghanāṅkuśa (1.108),³¹⁷ ghaṇṭaloha (2.42),³¹⁸ govāla (12.33),³¹⁹ kaṭaśarkara and -śarkarā (2.26; 15.27),³²⁰ mahākhu (13.12),³²¹ nirvāhika-yantra (10.2), prakāśamūṣā (12.8), raktaśulba (12.23),³²² śakalendra (16.25),³²³ strī-saṃbhava (4.85),³²⁴ sūtīkṣṇa (4.118),³²⁵ utpala (4.118),³²⁶ vaiṣṇava (4.119; 327 6.43), and vaiṣṇavāstra (15.194).³²⁸

Human flesh (naramāṃsa: 7.44)³²⁹ and human blood (narakudhira: 6.20 and 14.27; mānuṣa rakta: 16.13) are occasionally used in alchemical operations.

Uncommon names of plants are: adhaḥpuspī (15.75),³³⁰ agniparṇī (15.75, 139, 144),³³¹ bhikṣumārī (17.373), bhūmikurava (7.60), dalottamā (14.22), devī (15.44, 143),³³² dharākurava (9.2),³³³ dravamūlī (17.394), gandharvavāruṇī (4.19), godhā (15.103),³³⁴ govandanā (17.38), halā (1.78; 9.2; 15.108),³³⁵ hastivallī (4.20), jalabhāginī (17.37), kābukī (4.21), kadambinī (14.44), kalyāṇī (17.37),³³⁶ kanakabandhanī (7.37),³³⁷ kandalī (1.100; 16.73),³³⁸ kāntā (15.44), karaṭī (1.78), kaṭuvetasa (4.17), kavāṭī (15.100),³³⁹ kuraṭī (14.8 and 22), lohitākṣa (9.12),³⁴⁰ lohitākṣī (18.33), mahāvṛkṣa (12.63),³⁴¹ malaghnī (17.451), mārjāravallī (1.82),³⁴² muktā (1.79),³⁴³ muktamūlī (1.79), nādeyī (17.451), niśācarī (4.21), piñcholā (17.125), piśācī (14.29),³⁴⁴ raktāsana (9.2), samudrakārpāsa (15.72), śaśatṛṇa (7.37), setubandhinī (17.37), śirṣumāra (14.30; 18.26), smarajihvā (15.76),³⁴⁵ śukā (15.139; 17.38),³⁴⁶ suputrīṇī (1.78),³⁴⁷ vanyakukkura (1.78),³⁴⁸ viṣālu (1.78; 13.14), viṣāluka (17.429), viṣapaṇī (12.18), viṣṇuparṇī (17.37 and 373),³⁴⁹ vṛttaparṇī (15.102),³⁵⁰ yavacarcī (7.77; 14.16), and yavacarcikā (15.93).

Date

The period of composition of the *Rasopaniṣad* is unknown. Indications pointing to a relatively early age are the similarities as to structure and contents with the *Rasārṇava* and the absence of references to zinc.³⁵¹

Chapter 13

Various works on rasaśāstra and ratnaśāstra

ABHRAKAKALPA: a treatise on the properties and medicinal uses of mica (abhakra), written in A.D. 1679.¹

ABHRAKALAKṢAṆA.²

ABHRAKAMĀRAṆAPRAKĀRA.³

ABHRAKASATTVA.⁴

ABHRAKAVIDHI.⁵

ABHRAKAYOGA.⁶

ĀDIMASIDDHĀNTA.⁷

AGASTYASAMHITĀ by Agastya. A treatise of this title is mentioned as a work on rasaśāstra by P.V. Sharma.⁸ An *Agastyaśamhitā* is also referred to as a treatise on precious stones.⁹

An *Agastimata* is a work on ratnaśāstra.¹⁰ This treatise is the only one known describing a kind of bargaining through hand-signs, called *hastasaṃjñā*,¹¹ usual among jewellers in India;¹² this procedure has been recorded by Tavernier, who observed it during his travels.¹³ Some assign the *Agastimata* to the late sixth century;¹⁴ L. Finot regarded it as later in date than Buddhabhaṭṭa's *Ratnaparīkṣā* or *Ratnaśāstra*.¹⁵

The earliest reference to the *Agastimata* is found in Mallinātha's commentary on the *Śiśupālavadha*.¹⁶ The *Agastyamata* was known to Merutuṅga, the author of the *Pra-bandhacintāmaṇi*.¹⁷

The *Agastīyaratnaparīkṣā*,¹⁸ an extract from the *Agastimata* in one hundred verses, deals with: *vajra* and *muktā* (4–42), *māṇikyā* (43–61), *nīla* (62–75), *marakata* (76–81), *gomedā* (82–86), *puṣyarāga* (87–89), *vaidūrya* (90–92), *lājavartā* (93), and *pravāla* (94–96).

An *Agastyaśamhitā* forms part of the *Skandapurāṇa*; the *Hālāsyamāhātmya* of this *Agastyaśamhitā* contains a chapter (23) on ratnaśāstra; this chapter, consisting of 201 verses, is called *navaratnavikriyā*.¹⁹

ĀMAKUṬHĀRACŪRṆAVIDHĀNA.²⁰

ĀNANDARASARATNAMĀLĀ.²¹

AṢṬADHĀTUMĀRAṆAVIDHI.²²

AṢṬADHĀTUPARĪKṢĀ.²³

AṢṬAMAHĀMĀTRĀ:²⁴ a medical treatise in eight chapters on the method of preparing eight rasayogas (the eight mātras) and on their uses; a commentary is found at the end of each part. The name of the author and that of the commentator are not mentioned.

The authorities and works quoted or referred to in the commentary are: *Ākara*,²⁵ *Amara*, *Ānandakanda*, *Bhairavayogin*, *Ekākṣaranighaṇṭukāra*,²⁶ *Lakṣmaṇa*, *Nighaṇṭu*, *Rasacintāmaṇi*, *Rasaṇṭipikā*, *Rasahr̥daya*, *Rasakaumudikā*, *Rasamaṇḍalā*, *Rasānṛta*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasavaiśeṣikanighaṇṭu*, *Siddhanātha*,²⁷ *Sūtrasthāna*, and *Vaijayantī*.²⁸

AṢṬAMAHĀRASAVARṆANA.²⁹

ĀŚVINEYAMAHĀRĀJAMRGĀNKRASAVIDHĀNA.³⁰

ĀYURVEDARASAŚĀSTRA.³¹

ĀYURVEDARASAŚĀSTRA by Mādhava.³²

ĀYURVEDĪYA KHANIJA-VIJÑĀNA by Kavirāja Pratāpasimha.³³

This work deals with mercury (rasa) and sulphur (gandhaka); it describes the minerals (khanija) containing these elements; numerous formulae of rasayogas are also found in it.

Sources mentioned in this work are: *Arkaprakāśa*, *Āyurvedaprakāśa*, *Basavarājīya*, *Bhaiṣajyaratnāvalī*,³⁴ *Bhāvaprakāśa*, *Bṛhad yogatarāṅgiṇī*, *Cakradatta*, *Nighaṇṭuratnākara*, *Pāradasaṃhitā*, *Rasacandāmsu*, *Rasadarpaṇa*, *Rasakāmadhenu*, *Rasapārijāta*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasārapaddhati*, *Rasatarāṅgiṇī*, *Rasāyanasaṃgraha*, *Rasāyanasāra*, *Rasayogasāgara*, *Rasendracintāmaṇi*, *Rasendrasārasaṃgraha*, *Saivālabhākṣyamata*, *Śārngadharasaṃhitā*, *Ṭoḍarānanda*, *Vaidyacintāmaṇi*, *Vaidyajīvana*, *Vaṅgasena*, *Yogacintāmaṇi*, and *Yogaratnākara*.

BANDHASARVASVA by Gorakṣanātha.³⁵

BHAIRAVAGUṬIKĀVIDHI.³⁶

BHAIRAVAPRASĀDA.³⁷

BHAIRAVATANTRA.³⁸

BHAIŚAJYASĀRA,³⁹ *Bhaiṣajyasārāmṛta*,⁴⁰ or *Bhaiṣajyasārāmṛtasaṃhitā*,⁴¹ by Upeन्द्रamiśra. This work was used in the compilation of Dattarāma's *Bṛhadrasarājasundara*,⁴² Jñārasarāmaśarman's *Anupānadarpaṇa*, and Hariprapaṇṇa's *Rasayogasāgara*.⁴³

BHARANYAUṢADHA.⁴⁴

BHARANYAUṢADHAPRAYOGA.⁴⁵

BHĀRATĪYARASAPADDHATI by Atriḍeva.⁴⁶

BHASMACIKITSĀ.⁴⁷

BHASMACŪRṆAVIDHĀNA.⁴⁸

BHASMAKAUMUDĪ by Prāṇakṛṣṇa Viśvāsa, son of Rāmahari, grandson of Dayarāma.⁴⁹

BHĀSMANIRMĀṆAKRAMA.⁵⁰
 BHĀSMANIRŪPAṆA.⁵¹
 BHĀSMASĀDHANA.⁵²
 BHĀSMASINDŪRĀDINIRŪPAṆA.⁵³

BHĀVĀNĪMATA.⁵⁴ This work is quoted or mentioned as a source in the *Rasakakṣāpuṭa*, *Rasarājalakṣmī*, *Rasaratnapradīpa*, *Rasasindhu*, and Ṭoḍara's *Āyurvedasaukhyā*.⁵⁵

BHŪNĀGASATTVANIRŪPAṆA.⁵⁶
 BHŪNĀGATĀMRĀKALPA.⁵⁷
 BHŪTABHAIRAVĪ by Jñānabhūpati.⁵⁸
 BHŪTABHAIRAVĪRASANIRMĀṆAVICĀRA.⁵⁹

BṚHADRASARĀJASUNDARA by Dattarām Caube.⁶⁰

The treatise consists of three khaṇḍas, the first and third of which are divided into two parts. The first five chapters (adhyāya), forming together the pāradaprakaraṇa of the first half of the first khaṇḍa, deal with mercury and its processing (1–52). The remaining part of the first half of the first khaṇḍa is devoted to gandhaka (52–57), suvarṇa (57–64), raupya (64–68), tāmra (68–74), vaṅga (74–78), jasadā (78–80), nāga (80–83), loha (83–93), maṇḍūra (94–95), and miśradhātus (alloys; 95–100).

The second part of the first khaṇḍa is concerned with the upadhātus: suvarṇa- or hemamākṣika (100–107); raupya- or tāmramākṣika (107–108); vimāla or tāpīja (108–111); tuttha (111–115); capala (115–117); kaṅkuṣṭha, also called kākakuṣṭha, varāṅga and kolavāluka (117–118); rasaka (118–122); sindūra, also called raktareṇu, nāgagarbha and sīśaka (122–123); girisindūra (123); abhṛaka, also called vajra and gagana (123–143); haritāla (143–159); añjana (159–161); kāsīśa (162–163); gairika (163–164); hiṅgula or darada (164–168); ṭaṅkaṇa and tuvarī (168–170); maṇaḥśīlā (170–172); śaṅkha (172); khaṭī (172–173); varāṭikā or kapardikā (173); muktāśukti (174); śambukā (174); vālu(kā), also called sikatā, śarkarā and retajā (174–175).

The second khaṇḍa discusses śilājatu (175–182), enumerates the sādharmaṇarasas (kampilla, capalagaurīpāṣāṇa, naraśāraka, kapardī, vahnijāra, girisindūra, hiṅgula, kedāraśṛṅga), and deals with kampilla (182), gaurīpāṣāṇa or hatacūrṇaka (182–183), navasāra (= naraśāraka) or cullikālavaṇa (183), agnijāra (= vahnijāra; 184), samudraphena (184), bola (184), guggulu (185), rasakarpūra (186), the ratnas and uparatnas (186–213), viṣas and upaviṣas (213–227), groups of substances (227–229),⁶¹ weights and measures (229–230), puṭas (230–231), and yantras (231–242).

The first part of the third khaṇḍa consists of rasayogas against the diseases mentioned in the *Mādhavanidāna*. Added are prescriptions against kapharoga (464–466) and pittaroga (466–467) after vātavyādhi, against somaroga (493–494) after prameha, and formulae with a rasāyana and vājīkaraṇa action (536–550).

Sources quoted are: *Bauddhasarvasva* (429), *Bhaiṣajyasāraśrṅgamaṇihitā* (255),⁶² Bhāluki (117),⁶³ Bheḍa (384), Bhoja (384), Brahmayjotirmunīndra's *Ratnasāgara* (195–196),⁶⁴ Candrāṭa's *Yogaratanasamuccaya* (459), Gorakṣanātha (439),⁶⁵ *granthāntara* (100, 440), Jñānājyotis (288),⁶⁶ *Kākacandēśvara* (138), *Kaśyapasaṃhitā*

(390),⁶⁷ Kṣīrasvāmīn (142),⁶⁸ Lakṣmaṇotsava (330),⁶⁹ Mādhava's Sārakaumudī (291),⁷⁰ Nāgārjuna (118,⁷¹ 182),⁷² Nārāyaṇavilāsa (397),⁷³ Purandararahasya (36),⁷⁴ Rājarājesvaracintāmaṇi (148),⁷⁵ Rasadarpaṇa (118⁷⁶ and 159),⁷⁷ Rasapaddhati (118–119⁷⁸ and 188),⁷⁹ Rasapradīpa (256 and 323),⁸⁰ Rasarāja (296),⁸¹ Rasarājaka (298),⁸² Rasaratnākara (388), Rasaratnasamuccaya (244, 406, 464), Rasāṭṭhava (212⁸³, 463), Rasasāgara (279, 330, 458–459, 487), Rasasindhu,⁸⁴ Rasendracintāmaṇi (256), Rasendrakalpadruma (206),⁸⁵ Rasendrapadmakośa (206),⁸⁶ Rasendrasaṃhitā (376),⁸⁷ Śambhu (235),⁸⁸ Sārasaṃgraha (384–385),⁸⁹ Sārāvalī (384),⁹⁰ Śivānubhava (330),⁹¹ Suśeṇa (300),⁹² Suśruta (1), Tṛḍarānanda (121), Vāgbhaṭa (117),⁹³ Vāgbhaṭatantra (1), Vaidyanātha (137),⁹⁴ Vaidyarahasya (439–440),⁹⁵ Vaidyasāgara (1), Vaṅgasena (395–396), Vasantarāja (429),⁹⁶ Vṛnda (385–386), Yogasārāvalī (458),⁹⁷ and Yogatarāṅgiṇī 463–464).

The *Rasarājasundara* is one of the sources of the *Āyurvedīya Khanijavijñāna*, *Bhāratabhaiṣajyaratnākara*, *Bhṛṣajasaṃhitā*, *Pāradasaṃhitā*, *Rasayogasāgara*,⁹⁸ *Rasendra-sambhava*, and *Rasoddhāratāntra*.

The *Rasarājasundara* is quoted in the *Kūpīpakvarasanimānavijñāna*, the *Rasatattvavivecana*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Khare's commentary on the *Rasaratnasamuccaya*, and Somadevasārman's commentary on the *Āyurvedaprakāśa*. Hazārīlāl Sukul also refers to Dattarāma.

The *miśradhātus* (alloys) described are: two varieties of *kāṁsya* (puṣpa- and tailakakāṁsya), *kaṁsaka*, two varieties of *pittala* (rājārītikā and kākātunḍī), *pañcaloha*, and *bharta* or *vartalohaka*.

Vimala is of two varieties: *suvarṇa*- and *rajatavimala*, while some add a third kind, called *kāṁsya*vimala; *sasyaka* is said to be the same as *tuttha*; *kharpāra* is a variety of *tuttha*; the preparation of *nāgatāmra* is described (113); *capala* is of four varieties: *gaura*, *śveta*, *aruṇa* and *lṛṣṇa*; *capala* is regarded as either a *mahārāsa* or an *uparāsa* (116); *kaṅkuṣṭha* is of two varieties: *nalikā*- and *reṇukākaṅkuṣṭha*; *kaṅkuṣṭha* is an *upadhātu* of *vaṅga* (tin); *rasaka* is of two varieties: *dardura* and *kāravellaka*, but Nāgārjuna distinguishes the varieties called *rasaka* and *kalambuka*; the opinions of the authors of the *Rasadarpaṇa* and *Rasapaddhati* are quoted on *rasaka* and its varieties; *abhraka* is of four varieties: *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra*; their colours are white, red, yellow and black respectively; black *abhraka* is of the usual four varieties; *haritāla* is of two varieties: *pattra*- and *piṇḍaharitāla*, but some distinguish four varieties: *piṇḍa*, *pattra*, *godanta* and *vakaḍāla*; *añjana* is of two kinds: *yāmuna* and *kāpota*; *sroto'ñjana* is of two kinds too: *sroto'ñjana* *sensu stricto*, which is black, and *sauvīrāñjana*, which is white; the *Rasadarpaṇa* distinguishes five varieties of *añjana*: *sauvīrāñjana*, *rasāñjana*, *sroto'ñjana*, *puṣpāñjana* and *nīlāñjana*; *kāśīsa* is of three varieties: *sita*, *śyāma* and *pīta*; others distinguish two varieties called *vāluka* and *puṣpavāluka*; *gairika* is of two varieties: *pāṣāṇa*- and *svaṇagairika*, but some distinguish a third variety; *hīṅgula* is of three varieties: *camāra*, *śukātunḍa* and *hamsapāda*; *ṭaṅkaṇa* is of three varieties: *sphaṭikābha*, *guḍaprabha*, and *pāṇḍura* or *nīlakaṇṭha*; *manahīśilā* is of two varieties: *manohvā* and *pīvarī*, or of three types called *śyāmāṅgī*, *karavīrikā* and *dvikhaṇḍā*; *khaṭī* is of two types: *khaṭī* and *gaurakhaṭī*; *varāṭikā* is of three types: white, red and yellow.

Several classifications of śilājatu are mentioned: kāñcana-, raupya-, tāmra-, vaṅga-, nāga-, and lohaśilājatu, gomūtra- and karpūraśilājatu, giri- and ūśaraśaṃbhava; a white variety of śilājatu is called soraka. Bola is of two varieties: rakta and śyāma.

The ratnas and uparatnas are variously classified; the group called mañirasa consists of rājāvarta, puṣpa(rāga), mauktika, vidruma and vaikrānta (188); the usual kinds of diamonds are described; its five defects are: mala, bindu, yavarekhā and kākāpada;⁹⁹ the four types of bindu are: āvarta, varta, bhālabindu and yavākṛti;¹⁰⁰ the eight usual sources of pearls (mauktika) are enumerated: the pearl oyster (śukti),¹⁰¹ the pearl mussel (śankha),¹⁰² the elephant,¹⁰³ hog (kroḍa),¹⁰⁴ snake,¹⁰⁵ fish,¹⁰⁶ frog, and bamboo (veṇu);¹⁰⁷ eight varieties of vaikrānta are described.

The viṣas are variously classified into groups consisting of thirteen, eighteen and nine items; two classifications of the upaviṣas are mentioned; the first group consists of sruṣṭi, arka, lāṅgalī, guñjā, hayārī, viṣamuṣṭikā, jepāla, unmatta, and ahiphena (223); the second group is composed of bhallātaka, ativiṣā, four types of khākhasa, two types of karavīra and ahiphena, four types of dhattūra, two types of guñjā, nirviṣī, viṣamuṣṭi, and lāṅgalī; bhaṅgā and sehuṇḍa, left unmentioned in the classifications, are also described (226);

The yantras described are: kavacī-, dolā- or svedana-¹⁰⁸ garbha-, haṃsapāka-, vidyādhara-, lavaṇa-, ḍamaruka-¹⁰⁹ somānala-¹¹⁰ ūrdhvanalikā- or ṭaṅka-, vālu-kā-, bhūdhara-, pātāla-, dīpikā-, tejo- or lavaka-, kacchapa-, jāraṇā-, tulā-¹¹¹ ja-la-, dhūpa-,¹¹² sthālī-,¹¹³ gaurī-, koṣṭhayantra, vajra- or andhamūṣā, puṭa-, cakra-, pālikā-,¹¹⁴ iṣṭikā-, koṣṭhikā-, baka-, nāḍikā-, vāruṇī-, tiryakpātana-, kandu-¹¹⁵ and vallabhīyantra.

The divyauśadhis of the *Rasarājasundara* are (34–35): ajagarī, ajayā, amlapatrī, aśokaśāmnī, āsurī, aśvatthapatrī, bhūtakeśī, bilvadālā, bilvātāṅkī,¹¹⁶ brahmaṇḍī, cakoranāśā, citraka, devīlatā, dhanurvallī, gomārī, gonasī, gorocanā, goṣṭhāṅgī, hemadāṇḍī, hemalatā, īśvarī, jalapadminī, jayā, kaṭutumbī, kālaparṇī, kaṇḍakāśrī, kaṇḍapatrīkā, khadirapatrī, kīṭamārī, kṛṣṇavallī, kṣetrī, madhutṛṣṇā, mahāvallī, mayūraśikhā, nāgaṇī, nīlotpala, padmakandā, palāśatīlakā, patīkṣīrā,¹¹⁷ punnāgapatīkā, rajanī, raktakandavatī, raktavallī, rohiṇī, rudravantī, savarī, saptaṇḍī, sarvarā, śiṃhikā, somavallī, śṛṅgā, śrīnāmnī, talī, tridāṇḍī, trijaṭā, trīśūlī, tṛṇajyotis, tumbikā, vajranāmavallī, vajravallī, vārāhikā, vijayā, viśalyā, and vyāghrapādalatā.¹¹⁸

The author calls himself in the introductory verse Māthuranandana, a resident of Madhupurī; the Hindī translation adds that his name is Dattarāma. The colophon of chapter one identifies him as Dattarāma, the son of Śrīmāthura Kṛṣṇalāla. A more detailed genealogy is found at the end of the verses on the mīśradhātus; the author, Dattarāma, informs the reader that he is a brāhmaṇa of Māthuravamśa, son of Kṛṣṇalāla (Kanhaiyālāl), who was the son of Haricandra, one of the three sons of Ghāṣṭrāma.

Dattarāma belongs to the twentieth century.¹¹⁹

BRHATSAMHITĀ by Varāhamihira. This treatise contains four chapters on ratnaparīkṣā.¹²⁰ Chapter 79 deals, after a short introduction (1–3) and a list of precious and semi-precious stones (4–5), with the diamond (vajra; 6–18); chapter 80 (36 verses) is devoted to the pearl (muktāphala), chapter 81 (11 verses) to the ruby (padmarāga), and chapter

82 (one verse) to the emerald (marakata).¹²¹

The stones enumerated (79.4–5) are: vajra, indranīla,¹²² marakata, karketara, padmarāga, rudhirākhyā, vaidūrya, pulaka,¹²³ vimalaka,¹²⁴ rājamaṇi,¹²⁵ sphaṭika, śaśikānta (= candrakānta), saugandhika,¹²⁶ gomedaka, śaṅkha, mahānīla,¹²⁷ puṣparāga, brahmanaṇi,¹²⁸ jyōtirāsa,¹²⁹ sasyaka,¹³⁰ muktā, and pravāla.¹³¹

CANDRASENASIDDHĀNTA.¹³² Candrasena, who is also credited with the *Rasacandrodaya*, is a Rasasiddha.¹³³

Candrasena is quoted in the *Yogaratanākara*. The *Rasajalanidhi* attributes to him a description of puṣparāga¹³⁴ and a particular method of killing diamonds.¹³⁵

CARPAṬISIDDHĀNTA.¹³⁶ Carpaṭa, Carpaṭi, Carpaṭi(nātha), or Carvaṭi is mentioned in Jinadattasūri's *Suvarṇarāupyasiddhiśāstra*,¹³⁷ the *Rasakakṣāpuṭa*, the *Varṇaratnākara*,¹³⁸ and the *Vāsudevānubhava*.

He is quoted in the *Āyurvedasaukhya*,¹³⁹ *Lohasarvasva*,¹⁴⁰ *Yogaratanākara*,¹⁴¹ and *Yogatarāṅgiṇī*.¹⁴²

Some texts refer to him as a Rasasiddha.¹⁴³ Svātmārāma calls Carpaṭi one of the Mahāsiddhas.¹⁴⁴

Some regard Carpaṭi as one of the pupils of Gorakṣanātha,¹⁴⁵ others mention Vyāḍi as his teacher.¹⁴⁶ The Tibetan tradition sees in him the guru of Mīna Pā,¹⁴⁷ i.e., Mīnanātha or Matsyendranātha.¹⁴⁸ Carpaṭi is the twenty-fourth¹⁴⁹ or fifty-ninth¹⁵⁰ of the eighty-four Siddhas.¹⁵¹ King Sāhila of the Chamba state, who lived in the tenth century, is said to have held Carpaṭi in high esteem.¹⁵²

The *Sābaratantra* refers to Carpaṭanātha as one of the pupils of the twelve Kāpālika teachers.¹⁵³ A Hindī text called *Prāṇasaṅgālī* contains an improbable report about a conversation between Guru Nānak¹⁵⁴ and Carpaṭi.¹⁵⁵

Works attributed to Carpaṭi, apart from the *Carpaṭisiddhānta*, are the *Carpaṭaśataka*¹⁵⁶ and *Rasacandrodaya*.¹⁵⁷

Carpaṭi¹⁵⁸ is assigned to the eleventh,¹⁵⁹ twelfth or thirteenth century.¹⁶⁰

CIKITSĀRATNĀBHARĀṆA by Sadānanda Dādhīca.¹⁶¹ This work is one of the sources of Hariprapanna's *Rasayogasāgara*¹⁶² and Hariśaraṇānanda's *Kūṭīpakvarasānirmāṇa-vijñāna*. Syphilis (phiraṅga) is mentioned in it.¹⁶³

CIKITSĀ(SĀRA)RAHASYA by Hārīta Muni.¹⁶⁴ This work is one of the sources of Hariprapanna's *Rasayogasāgara*. Hārītamuni is quoted in Nityanātha's *Rasaratanākara*.

CINTĀMAṆIRASAVIDHĀNTA.¹⁶⁵

DATTĀTREYASAMHITĀ by Dattātreya.¹⁶⁶

DEVĪŚĀSTRA.¹⁶⁷ This work is quoted or mentioned in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Bhāratabhāṣajaratnākara*,¹⁶⁸ Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Basavarājīya*, *Rasaprakāśasudhākara*, *Rasaratnasamuccaya*, and *Rasayogasāgara*.¹⁶⁹

The *Devīśāstra* is sometimes considered to be the same as the *Rasārṇava*.¹⁷⁰

DEVĪYĀMALA.¹⁷¹ Quoted in one of the pariśiṣṭas of the *Ānandakanda*,¹⁷² the *Kū-pīpakvarasanimāṇavijñāna*, and the *Rasakāmadhenu*. A *Devayāmala* is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*.

DHARAṆĪDHARASAMHITĀ¹⁷³ by Dharaṇīdhara, son of Jvālānanda.¹⁷⁴ This work is profusely quoted in the *Pāradasaṃhitā*. Quotations also occur in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya* and in the *Kūpīpakvarasanimāṇavijñāna*.

The *Dharaṇīdharasaṃhitā* lists the following divyauśadhis: agnikarṇikā, ākhuparṇikā, amṛtākanda, apāmarga, aparājītā, bhūkadamba, brahmadanḍī, bṛhatī, cakramārda, citraka, daṇḍī, dhattūra, dūrvā, gojihvā, grīṣmasundarā, haridrā, hastiśuṇḍī, iṣupunkhikā, iśvari, jāti, jayantī, kākajaṅghā, kākamācī, kañcukī, kaṭutumbikā, kośātakī, kṛṣṇasārīvā, kṣīrīṇī, kumārīkā, kusumbhaka, lajjālu, lakṣmaṇā, lāṅgalī, mahārāṣṭrī, maṇḍūkapaṇī, mīnākṣī, mṛgadūrvā, nīrakaṇā, nirguṇḍī, pātālī, raktālu, rambhā, rasāṅkuśā, sairīya, śaṅkhapuspikā, śarpākṣī, śatāvarī, śigru, śikhiśikhā, śimbikā, śrīdevī, suradārikā, sūryāvarta, śvetārka, tilapaṇikā, tulasī, utpala, vajrakandā, vajralatā, vandhyā, vārāhī, varṣābhū, vidārī, and vṛddhī.¹⁷⁵

Works quoted in it are the *Rasaḥṛdaya* and *Rasaprakāśasudhākara*.¹⁷⁶

The acquaintance of the author with the *Rasaprakāśasudhākara* implies that he cannot be earlier than the sixteenth century.

DHĀTUNĪNĀNA.¹⁷⁷

DHĀTUKALPA.¹⁷⁸

DHĀTUKALPARĀJA.¹⁷⁹

DHĀTUKAUTUKA.¹⁸⁰

DHĀTUKRIYĀ¹⁸¹ or *Dhātumañjarī*¹⁸² by Bhairavānandayogin.¹⁸³ This work forms part of the *Rudrayāmala*, is in the form of a dialogue between Mahādeva (i.e., Śiva) and Pārvatī, and deals with alchemy, not with iatrochemistry.

Many synonyms of the metals occur in this text. Zinc is designated by the terms jāsattva, jarātīta, rājata, yaśadāyaka, rūpyabhrātara, varīya, troṭaka, carmaka, kharpara, rasaka, rasavardhaka, etc.¹⁸⁴

The upadhātus mentioned, together with their synonyms, are: haritāla, manāṣīlā, abhṛaka, and somala or malla.¹⁸⁵ Other substances mentioned, together with their synonyms, are: muktā (pearl), vidrūma (coral), kūrmapṛṣṭha (tortoiseshell), śaṅkha, śuktikā, gajadanta (ivory), śikhipiccha (peacock's feathers), nakha and keśa (nails and hair).¹⁸⁶

Many geographical names appear in the verses devoted to the places where various substances are found.¹⁸⁷ Some of these names are: Gautamādri (149), Gayādri (149),¹⁸⁸ Kāmarūpa (141; 144),¹⁸⁹ Kāmboja (146), Kedāra (148),¹⁹⁰ Kumbhādri (146), Laṅkā (121),¹⁹¹ Lihādri (149), Malādri (144), Mlecchadeśa (144), Nalādri (149), Nepāla (144; 147),¹⁹² Niṣkala (149), Pāvakādri (145), Sindhudeśa (141), Tripura (148), and Tryambaka (148; 150).¹⁹³

Various operations resulting in the production of artificial gold and silver are described, as well as several procedures to make substances which resemble these no-

ble metals. The accumulation of wealth (dhanasampatti) is an important subject in this treatise.

Among the foreign countries, mentioned in the verses on the origin of copper and zinc, figure Rūmadeśa and Phiraṅgaka,¹⁹⁴ which, together with the mention of phiraṅgaraga, indicates that this work is posterior to the sixteenth century.¹⁹⁵

A Bhairavānanda, who need not be the author of the *Dhātukriyā*, is mentioned in the *Bhāvaprakāśa*,¹⁹⁶ *Bheṣajasaṃhitā*,¹⁹⁷ *Bṛhadyogatarāṅgiṇī*,¹⁹⁸ *Rasasaṃketakalikā*,¹⁹⁹ and *Rasayogasāgara*.²⁰⁰

Bhairavānandayogin is referred to in the *Rasakāmadhenu*²⁰¹ and *Rasaratnasamuccaya*.²⁰²

A master magician called Bheravānanda (= Bhairavānanda) figures in Rājaśekhara's *Karpūramañjarī*.²⁰³

DHĀTUMAÑJARĪ, anonymous.²⁰⁴

DHĀTUMAÑJARĪ by Sadāśiva.²⁰⁵

DHĀTULAKṢAṆA, ascribed to Nārada.²⁰⁶

DHĀTUMĀRAṆA.²⁰⁷

DHĀTUNIDĀNA.²⁰⁸

DHĀTUPADDHATĪ.²⁰⁹

DHĀTUPADHĀTUBHASMAKRIYĀ.²¹⁰

DHĀTUPARĪKṢĀ.²¹¹

DHĀTUPRAKARAṆA.²¹²

DHĀTURASĀYANA.²¹³

DHĀTURATNAMĀLĀ, anonymous.²¹⁴

DHĀTURATNAMĀLĀ by Devadatta, son of Hari.²¹⁵ This text is sometimes regarded as forming part of the *Aśvinīkumārasaṃhitā*.²¹⁶ It describes in 184 verses the characteristics (lakṣaṇa), purification, killing, and medicinal properties (guṇa) of the dhātus and upadhātus.²¹⁷ The substances dealt with are: raupya, hema, tāṃra, nāga, vaṅga, ayas or loha, kharpara,²¹⁸ abhraka, mauktika,²¹⁹ pravāla, tālaka, śilā, māṅṣika, gandhaka, sūta (mercury), and hīraka.

Noteworthy is the distinction of four types of loha (58–59ab: brāhma = vāḍava, kṣatriya, vaiśya = kāntaloḥa, śūdra = maṇḍūra), two types of kharpara (81: jasada = zinc, and sattvaka), three types of abhraka (89: nāga, vajra, dardura),²²⁰ two types of mauktika (113: sāṃudra and hastikumbhaka), and two types of gandhaka (136: guṇjika and amlasāraka).

A vernacular term used by the author is sera.²²¹ Noteworthy names of plants are gajavāruṇī (151), kalajātikā (153), tilvaṇī (152), and sārāpuṣpā (152).

The *Dhāturatnamālā* is one of the sources of the *Pāradasaṃhitā*, which quotes it.

The treatise is assigned to the fourteenth,²²² sixteenth,²²³ eighteenth,²²⁴ or nineteenth century.²²⁵ One of the MSS²²⁶ dates, however, from A.D. 1660/61.

DHĀTURATNĀVALĪ.²²⁷

DHĀTURATNĀVALĪ by Siddhadeva.²²⁸

DHĀTUŚODHANA.²²⁹

DHĀTUŚODHANA or *Candracakorikā*.²³⁰

DHĀTUŚODHANA by Mallinātha.²³¹

DHĀTUŚODHANAMĀRAṆAVIDHI.²³²

DHĀTUŚODHANAPRAKRIYĀ.²³³

DHĀTUŚUDDHI.²³⁴

DHĀTUŚUDDHIPRAKARAṆA: ²³⁵ a work dealing with the purification of various substances in order to make them suitable to be used in medicinal preparations.²³⁶

DHĀTŪTPATTI by Ṭhakkura Pherū.²³⁷ This treatise, written in Prakrit, consists of fifty-seven verses. The subjects are: pittali or pittala (6–7); tambaya (= tāmra; 8–10); sīṣaya (= sīsa; 11–13); raṅgaya (= raṅga; 14); kaṃsa(ya) (= kāmśya; 15); pāraḍa (16–19); hiṅgūlaya (= hiṅgula; 20–22); sindūra (23–27); the worship of dakṣiṇāvartaśaṅkha,²³⁸ rudrākṣa and śāligrāma (28–44); karpūra (45–46); agara (= aguru; 47–50); candana (51–54); mṛṅganābhi (musk; 55); kuṅkuma (56); dhūpas (perfumes; 57).

Amber (kaharavva) was known to Ṭhakkura Pherū.²³⁹

The *Dhātūtpatti* may be an extract from Ṭhakkura Pherū's *Bhūgarbhaprakāśa*, a work on mining and metallurgy.²⁴⁰

DHĀTUVĀDA.²⁴¹

DHĀTUVĀDA(-UPADEŚA)²⁴² by Na-li.²⁴³ This short treatise, lost in the original Sanskrit, was translated into Tibetan under the title of *Gser-hgyur-gyi rci(-hi gdams-pa)*.²⁴⁴ It forms part of the Rgyud-hgrel (Tantravṛtti) section of the Tanjur.

The *Dhātuvāda*²⁴⁵ describes in fourteen verses methods to transmute base metals into gold. One of the substances employed is mahāmārṇsa (śa-chen).²⁴⁶ Kuṣṭha (ru-rta), which grows in the Himālaya, is depicted as a plant from the leaves of which drips a fluid having the colour of gold.

DHĀTUVĀDAPRAKARAṆA by Soma. This is a treatise in Prakrit, consisting of twenty-five verses, forming an appendix to Soma's *Ratnaparīkṣā*, and giving an account of the transmutation of copper into gold. It may date from the fourteenth century.²⁴⁷

DIVYARASENDRASĀRA by Dattātreyā.²⁴⁸

DIVYARASENDRASĀRA by Dhanapati.²⁴⁹

DIVYAUṢADHĪKALPA.²⁵⁰

DIVYAUṢADHIPRAKARAṆA.²⁵¹

DIVYAUṢADHYADHIKĀRA by Govindācārya.²⁵²

DVĀDAŚĀRTHANIRŪPAṆA by Bāhaṭācārya.²⁵³

GANDHAKABHṚṆGARĀJAKALPA.²⁵⁴

GANDHAKAKALPA:²⁵⁵ said to form part of chapter twenty-eight of the *Rudrayāmala*,²⁵⁶ and to deal with the medical properties of sulphur and the preparation of

medicines from it;²⁵⁷ it is one of the sources of the *Pāradasaṃhitā*.

GANDHAKAKALPĀDISAṂGRAHA.²⁵⁸

GANDHAKALPA.²⁵⁹

GANDHAKARASĀYANA.²⁶⁰

GANDHAKASATTVA.²⁶¹

GANDHAKAVARJYATĀNIRŪPA.²⁶²

GAṄGĀDHARARASAVIDHI.²⁶³

GAURĪKĀNCALIKĀTANTRA.²⁶⁴

This treatise, in the form of a dialogue between Īśvara and Devī,²⁶⁵ consists of 355 verses.²⁶⁶ Subjects dealt with are:²⁶⁷ *kālañjāna* (24–79); *ṛtubheda* (81–87);²⁶⁸ *citrakalpa* (88–92);²⁶⁹ *maṇḍūkaparṇīkalpa* (93–95);²⁷⁰ *punarnavākalpa* (96–100);²⁷¹ *nirguṇḍīkalpa* (101–120);²⁷² *hastikarṇakalpa* (121–137);²⁷³ *śvetārkaḥkalpa* (138–150);²⁷⁴ *bhṛṅgarājakalpa* (151–154);²⁷⁵ *kāchalākalpa* (155);²⁷⁶ *amlalonīkalpa* (156–157);²⁷⁷ *śālmālīkalpa* (158–167); *abhayākākalpa* (168–172); the treatment²⁷⁸ of *jvara* (180–200), *bahumūtra* (201–202), *mūtrakṛcchra* (203–205), *bindu(srāva)kṣaya* (a deficient amount of ejaculated semen; 206–209), *kuraṇḍa* and *galagarḍa* (210–214), *bhagandara* (215), *kāmalā* (216), *vaivarṇya* (217),²⁷⁹ *kāsa* and *śvāsa* (218–220), *yakṣman* and *kṣaya* (221–223), *nāsāraktasrava* (nosebleeds; 224), *arśas* (225–226), *karṇaśūla* (227–229), *netraroga* (230–233), *śīroroga* (234–235), *dantaroga* (237–239), *atīśāra* (240–242), *śūla* (243–246),²⁸⁰ *vicarcikā* (247), *kuṣṭha* (248–254), *plīharoga* (255), *visphoṭaka* (256–257), *arbuda* (258), *agnidagdha* (259–260), *ślīpada* (261–263), *nidrākṣaya* (insomnia; 264–266), and *nidrā* (267–271); *adr̥śya* (making oneself invisible; 272–275); *nidhidarśana* (the discovery of hidden treasures; 276–277); *dehadurgandha* (the removal of a bad bodily smell), *kānti*, *puṣṭi*, etc. (283–290); *vaśīkaraṇa*, *mohana*, *vājīkaraṇa*, *stambhana*, etc. (309–355).

The *Gaurīkāñcalikātantra* is quoted in Jñānasaṁśarman's *Anupānadarpaṇa*.

The treatise is sometimes said to belong to the sixteenth century.²⁸¹

GOVINDASIDDHĀNTA.²⁸²

GUṬIKĀRASACIKITSĀ.²⁸³

HARĪSIDDHĀNTA.²⁸⁴

HARĪŚVARATANTRA.²⁸⁵

HIṆGULAPRAKARAṆA by Vinayasāgara Upādhyāya.²⁸⁶

JĀRAṆAMĀRAṆĀDI.²⁸⁷

JVARANIVĀRAṆABHASMAVIDHĀNA.²⁸⁸

JVARĀṆKUṢAṢAṂJĪVANARASĀDI.²⁸⁹

JVARĀṆKUṢAVIDHĀNA.²⁹⁰

KĀDAMBAKAKALPA by Īśvara.²⁹¹

KAILĀSAKĀRAKA: a work in the form of a dialogue between Śiva and Pārvatī, dealing with the purification of mercury and its uses in medicinal preparations.²⁹²

KALPADRUMASĀRASAMĠGRAHA by Jayarāmagiri, pupil of Caitanyagiri: a work on mercurial preparations in a mixture of Sanskrit and Hindi.²⁹³

KĀMADHENUTANTRA.²⁹⁴

KANAKASINDŪRARASAVIDHI.²⁹⁵

KĀPĀLIKATANTRA.²⁹⁶ Kāpālika is mentioned as one of the Rasasiddhas in Caturbhujā's commentary on the *Rasaḥṛdaya* (1.7), the *Pāradasaṃhitā* (1.98), *Rasaratnākara*,²⁹⁷ *Rasaratnasamuccaya* (1.4; 6.52), and *Rasataraṅgiṇī* (1.29–32); he is a Mahāsiddha in Svātmārāma's *Haṭhayogapradīpikā* (1.8).²⁹⁸ One of the sixty-four Siddhas, Kāhnūpāda or Kṛṣṇapāda, pupil of Jālandharanātha, called himself Kāpālika.²⁹⁹

Kāpālikayogas are repeatedly described in the *Rasārṇava*.

KĀPĀLĪSIDDHĀNTA.³⁰⁰ Kāpālī(n) is mentioned in the *Ratnākaraśaḍhayogagrantha*, Revāṇasiddha's *Virabhaṭṭīya*, the *Sarvadarśanasamgraha*, and the *Vaidyaśāstrapravartakācāryanāmasamuccaya*. Kāpālīn forms part of the group of Rasasiddhas in Caturbhujā's commentary on the *Rasaḥṛdaya* (1.7), the *Pāradasaṃhitā* (1.96) and the *Rasaratnasamuccaya* (1.2); he is one of the Mahāsiddhas in Svātmārāma's *Haṭhayogapradīpikā* (1.7). Kāpālī is a Rasasiddha in the *Raseśvarasiddhānta*.³⁰¹ Kāpālīn is credited with the *Rasarājamahodadhi*.

Kāpālīn, Kāpālīn, Kāpālī and Kāpālika may designate one and the same person.³⁰²

G. Hāldār regards Kāpālī as a Śaka king, who was the son of Vāsudeva and teacher of Kandalāyana;³⁰³ he places him in the second or third century.³⁰⁴

KHAṆḌASIDDHĀNTA.³⁰⁵ Khaṇḍa is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasajalanidhi*, *Rasaratnākara*, and *Rasaratnasamuccaya*. Caturbhujā's commentary on the *Rasaḥṛdaya* (1.7) mentions Khaṇḍīn instead of Khaṇḍa as a Rasasiddha. The *Haṭhayogapradīpikā* (1.8) refers to Khaṇḍa as one of the Mahāsiddhas.

KHECARĪVIDYĀ, ascribed to Ādinātha.³⁰⁶ This small treatise in four chapters and 285 verses begins with praising itself (1.1–28), followed by an account of the khecarīmantra (1.29–40); the remaining part of chapter one is devoted to the preparations for and practice of the khecarīmudrā (1.41–74).³⁰⁷ Chapter two, the longest, describes the siddhis, the subtle body, the cakras, etc.; a portion of this chapter (2.81–97) deals with the effects of Haṭbayoga practices on the doṣas. Chapter three discusses the raising of the Kuṇḍalinī, her union with Śiva, and the realization by the practitioner of bodily liberation. Chapter four is about divine herbs (divyauśadhi), necessary for the attainment of siddhis, and on the consumption of mercury, sulphur, realgar and opiment.

The *Khecarīvidyā* calls itself in its colophons a portion of a treatise called *Mahākālayogaśāstra*.³⁰⁸ A work of this title is referred to by two mediaeval commentators³⁰⁹ as concerned with Haṭhayoga. The *Khecarīvidyā* itself is cited by works called *Mahākāla* and *Mārtanḍaviveka*. The latter is the *Yogamārtanḍa* or *Vivekamārtanḍa* of Gorakṣanātha; the former, if not the *Mahākālayogaśāstra* itself, may be the *Mahākālasaṃhitā*, at-

tributed to Ādinātha.³¹⁰

The first chapter of the *Khacarīvidyā* is often reproduced as the second chapter of the *Yogakuṇḍalyupaniṣad*.³¹¹

Since three verses of the *Khacarīvidyā* are reproduced in the fifteenth-century *Haṭhayogapradīpikā* of Svātmārāma, the former may date from the fourteenth century.

KRAVYĀDIRASANIRMĀṆAVIDHI.³¹²

KṚTRIMARASAYOGAVICĀRA.³¹³

KUBJIKĀMATATANTRA.³¹⁴ This Tantra contains a passage in which Śiva himself speaks of mercury (pārada) as his generative principle; he eulogizes the efficacy of this substance when killed six times. The transmutation of copper into gold, with the aid of mercury, is alluded to. Various alchemical processes are referred to.³¹⁵

The Kulālikāmnāya version³¹⁶ contains a list of aṣṭas (23.15c–43) and material of medical interest on conception, embryology, the structure of the human body, the series of dhātus, etc.³¹⁷

The oldest MS used for the critical edition of the Kulālikāmnāya version was completed during the reign of Rāmapāla (A.D. 1077–1120); another MS dates from A.D. 1134–1135.³¹⁸ The oldest available MS of the *Kubjikāmata* dates from the reign of king Lakṣmikāmadeva (A.D. 1024–1040); it contains the version called Laghvikāmnāya.³¹⁹

The place and date of origin of the Kubjikā cult³²⁰ and the region where the *Kubjikāmata* was composed³²¹ are disputed issues.

LAGHURATNAPARĪKṢĀ.³²²

LAMPATATANTRA.³²³ Lampāṭa is one of the Rasasiddhas in the *Rasaratnākara*.³²⁴ Some treatises change his name into Lampaka³²⁵ or Lambaka.³²⁶

The LAUHAPRADĪPA, a work by Trivikrama,³²⁷ is a treatise in four chapters (pariccheda) on the medicinal use of inorganic substances. The titles of the chapters are: (1) lauhasya saṃskārāḥ, (2) upacāraḥ, (3) lauhayogānāṃ saṃgrahaḥ, (4) guṇalakṣaṇanirdeśo lauhānām.³²⁸

The introductory stanzas refer to the following sources: Jīvanātha, Nāgārjuna, Patañjali,³²⁹ and Vindhyasthasanmuni.

The work contains quotations, which are sometimes very long, from Amoghācārya, Bhojarāja's *Āyurvedasarvasva*, Jīvanāthācārya, *Nāgabuddhīnirghaṇṭu*, Nāgārjuna, *Pātañjalatantra*, Patañjali, Vaṅgasena, Vindhyavāsini,³³⁰ and *Yogaratanākara*.³³¹ lauhācāryas and other lauhaśāstras are also cited.³³²

Trivikrama is quoted by Āśubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Gopāladāsa,³³³ Govindasena,³³⁴ Kāśīrāma,³³⁵ Mādhava in his *Āyurvedaprakāśa*, the author of glosses on Nityanātha's *Rasaratnākara*,³³⁶ Śivādāsa,³³⁷ and in the *Rasendracintāmaṇi*.³³⁸

The *Lauhapradīpa* is cited in Āśubodha's commentary on Govindasena's *Paribhāṣapradīpa*³³⁹ and in an anonymous *Śārīra*.³⁴⁰

Trivikrama was probably a resident of Bengal³⁴¹ and may have lived in the twelfth or thirteenth century since he is later than Vaṅgasena and earlier than Gopāladāsa.³⁴²

LOHABHASMAGUṆOPAYOGAVICĀRA.³⁴³

LOHAPRABHEDANIRŪPAṆA.³⁴⁴

LOHAPRADĪPA.³⁴⁵

LOHAPRAKARAṆA.³⁴⁶

LOHARATNĀKARA.³⁴⁷

LOHĀRṆAVA.³⁴⁸

The LOHASARVASVA or *Lohapaddhati* was written by Sureśvara, also called Surapāla.³⁴⁹

The *Lohasarvasva*³⁵⁰ treats, in 318 stanzas, of lohas and their medicinal uses.³⁵¹ The author announces that, though eight lohas are known, four only will be dealt with in his work, namely iron, mica, gold, and copper (7cd–9ab). The origin, characteristics, purification and killing of iron (loha; 9cd–70),³⁵² mica (abhraka; 71–101), gold (suvarṇa; 102–115), and copper (tāmra; 116–125) are described. The extraction of the essence (sattvapātana) of mica (abhraka) and the killing of this essence are also discussed (81–101).

Eight types of iron are distinguished: sāra, auḍra, kalingaja, bhadra, vajra, pāṇḍi, kāntaja, and nīrava (12cd–20ab). The vegetable and mineral substances used in the killing of iron³⁵³ and in various puṭapākas are enumerated (25–29).

Some useful mantras are mentioned (134–138), followed by a list of anupānas (139–151) and dietary and behavioural rules to be observed after taking inorganic medicines (152–166).

Sureśvara proceeds with a series of formulae. Preparations containing one loha come first (loha: 170–216; abhraka: 217–226; suvarṇa: 227–234; tāmra: 235–238), followed by those containing two (239–276), three (277–297), and four lohas (299–300).

In spite of the assertion that four lohas only would be considered, the work ends with preparations containing five and more lohas, up to eight (301–316).³⁵⁴

Sources referred to by Sureśvara are: the *Lohatantras* of Hārīta, Nāgārjuna, Suśruta and Vyāḍi (6; 23).

The *Lohapaddhati* or *Lauhapaddhati* is quoted in the *Rasakāmadhenu*, Guḷrā-jśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Todiāra's *Āyurvedasaukhyā*.³⁵⁵ The *Lohasarvasva* is cited in Guḷrā-jśarmamiśra's *Viśikhānupraveśavijñāna*. The work is mentioned as one of the sources of the *Pāradasaṃhitā*, *Rasayogasāgara*³⁵⁶ and Yādavjī Trikamjī Ācārya's *Rasāmṛta*.

Two other works attributed to the same author are the *Śabdapradīpa*, a homonymic dictionary of medical botany in two sections and numerous chapters,³⁵⁷ and the *Vṛkṣāyurveda*, a work on arboriculture.³⁵⁸

Sureśvara³⁵⁹ or Surapāla³⁶⁰ was a court-physician (bhiṣagantaraṅga) to king Bhīmāpāla. His father Bhadreśvara³⁶¹ held the same office under king Rāmāpāla

(A.D. 1078–1120)³⁶² and his great-grandfather Devagaṇa under Govindacandra.³⁶³ His grandfather, Yaśodhana, was not a medical practitioner.³⁶⁴

Irrespective of the identity of Bhīmapāla,³⁶⁵ Sureśvara, the son of the court-physician to Rāmapāla, must have lived in the first half of the twelfth century.³⁶⁶

LOHAŚĀSTRA.³⁶⁷

LOKOTTARARASAVIDHĀNA.³⁶⁸

MADANAKĀMEŚVARAYOGA by Satyanātha.³⁶⁹

MADANAKĀMEŚVARĪNIRMĀṆAVIDHI.³⁷⁰

MAHĀDBHUTARASATANTRA by Vīrabhadra.³⁷¹

MAHĀDEVARASATANTRA by Kārttikeya.³⁷²

MAHĀDEVATANTRA.³⁷³

MAHĀPŪRṆACANDRODAYA by Pūjyapāda.³⁷⁴

MAHĀPŪRṆACANDRODAYAYOGA.³⁷⁵

MAHĀRĀJAMṚGĀṆKA.³⁷⁶

MAHĀRASĀṆKUŚA by Rasāṅkuśa.³⁷⁷ Rasāṅkuśa is one of the Rasasiddhas in the *Pā-radaśaṇhitā* (1.99) and *Rasaratnasamuccaya* (1.5). Rasāṅkuśa is an author or the title of a work quoted by Tṛḍara.

MAHĀRASAPRAKARAṆA.³⁷⁸

MAHĀRASĀYANATANTRA.³⁷⁹

MAHĀRASĀYANAVIDHI.³⁸⁰

MAHĀSINDŪRARĀJAMṚGĀṆKASŪRYAPRABHĀVATARASAVIDHĀNA.³⁸¹

MAHODADHI by Śivanātha Yogin.³⁸²

MAKARADHVAJĀDIRASAVIDHI.³⁸³

MAKARADHVAJARAHASYA.³⁸⁴

MAṆIKALPA by Mān Tuṅgasūri, who may have lived in the thirteenth century: a treatise on precious stones in 225 verses.³⁸⁵

MĀṆIKARATNAPARĪKṢĀ.³⁸⁶

MAṆIMĀHĀTMYA or *Maṇiparīkṣā*.³⁸⁷

MAṆIMĀLĀ by Sourindro Mohun Tagore.³⁸⁸ This treatise, entirely in verse, deals, after some introductory verses, with the following gems: the mythical jewel called syamantaka (9–72); vajra (diamond; 73–151);³⁸⁹ māṇikya (ruby; 152–219);³⁹⁰ vaidūrya (cat's eye; 220–242);³⁹¹ muktā (pearl; 243–329);³⁹² gomeda (zircon; 330–337);³⁹³ vidrūma (coral; 338–356);³⁹⁴ marakata (emerald; 357–387);³⁹⁵ puṣparāga (topaz; 388–396);³⁹⁶ indranīla (sapphire; 397–424);³⁹⁷ karketana (chrysoberyl; 425–429);³⁹⁸ pulaka (garnet; 430–432);³⁹⁹ rudhirākhyā (carnelian; 433–434);⁴⁰⁰ sphaṭika (quartz; 435–444);⁴⁰¹ bhīṣma (rock crystal; 445–452).⁴⁰²

Many gems⁴⁰³ are divided into four types, named after the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra).

Sources are not indicated.⁴⁰⁴ King Soma is referred to as an authority on diamonds (120). A sage called Kara is also quoted (349).

MAṆIPARĪKṢĀ.⁴⁰⁵

MAṆIPARĪKṢĀKALPA.⁴⁰⁶

MANTHĀNABHAIRAVA by Manthānabhairava.⁴⁰⁷

Manthānabhairava is quoted or mentioned in Dattarāma's *Bṛhadrasarājasundara*,⁴⁰⁸ Lakṣmīrāma's commentary on the *Siddhabheṣajamaṇimālā*, the *Rasendracūḍāmaṇi*,⁴⁰⁹ Ṭoḍara's *Āyurvedasaukhya*, and Trimalla's *Yogatarāṅgiṇī* and *Bṛhadhyogatarāṅgiṇī*.

He is mentioned as one of the Rasasiddhas in Caturbhujā's commentary on the *Rasaḥḍaya* (1.7), the *Pāradasaṃhitā* (1.99), *Rasajalanidhi* (III, 389–390), *Rasaratnasamuccaya* (1.6), *Rasatarāṅgiṇī* (1.29–32), and *Rasendrasambhava* (introductory verses). Manthāna is a Mahāsiddha in Svātmārāma's *Haṭhayogapradīpikā* (1.6).

Formulae ascribed to Manthānabhairava are found in the *Bhaiṣajyaratnāvalī*,⁴¹⁰ *Bhāratabhaiṣajyaratnākara*,⁴¹¹ *Rasaratnasamuccaya*,⁴¹² *Rasayogasāgara*,⁴¹³ *Rasendracintāmaṇi*,⁴¹⁴ and *Yogaratnākara*.⁴¹⁵

MĀṬṚKĀBHEDATANTRA.⁴¹⁶ This treatise, consisting of 573 verses, arranged in fourteen chapters (pāṭala), and composed in the form of a dialogue between Śaṃkara and Caṇḍikā, contains, though chiefly devoted to spiritual practices of a Tantric nature, some interesting matter pertaining to alchemy and medicine.⁴¹⁷

The work describes the transmutation of copper into silver by the aid of an unknown substance called sambala (1.2–16), processes to which mercury and copper are subjected, aurification, and the beneficial effects of ingesting mercurial products (5.1–43), the preparation of the rasaliṅga (8.1–37), the reduction of minerals to ashes and the use of these ashes as drugs (9.1–31).

Some of the titles of the chapters (pāṭala) in a MS described by R. Mitra are: *raupyanirmāṇopāyakathana* (1), *saṃtānotpattiniyamakathana* (2), *mokṣasādhana* (3), and *pāradabhasmīkaraṇopāyatadbhasmamāhātmyakathana* (5).⁴¹⁸

A *Cīnatānta* (1.7),⁴¹⁹ *Kālītānta* (1.7),⁴²⁰ and *Ṭoḍalatantra* (8.18)⁴²¹ are referred to.

A number of correspondences with Nāthasiddha texts may point to the eleventh or twelfth century as the period of composition.⁴²² D.G. White is of the opinion that the *Māṭṛkābhedatantra* is a relatively late text, probably dating from the latter part of the thirteenth century.⁴²³

The *Māṭṛkābhedatantra* is quoted in Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha* and the commentary on the *Rasaratnasamuccaya* by Āsubodha and Nityabodha Senagupta.

MṚDĀNĪTANTRA.⁴²⁴

MŪṢĀLEPAVIDHI.⁴²⁵

NĀGABODHISIDDHĀNTA.⁴²⁶

NĀGĀRJUNĪVIDYĀ.⁴²⁷

NANDĪTANTRA.⁴²⁸

NĀSATYASAMHITĀ.⁴²⁹

NAVAGRAHARASA.⁴³⁰

NAVARATNA.⁴³¹

NAVARATNADHĀTUVĪDYĀ.⁴³²

NAVARATNADHĀTUVIVĀDA by Balabhadra.⁴³³

NAVARATNAMĀLĀ, anonymous.⁴³⁴

NAVARATNAMĀLĀ by Mallinātha, son of Govinda.⁴³⁵

NAVARATNAPARĪKṢĀ by Nārāyaṇa Paṇḍita,⁴³⁶ This treatise, which forms part of the author's *Smṛtisāroddhāra*,⁴³⁷ deals with: vajra (36–57), muktāphala (58–106), padmarāga (107–125), indranīla (126–140), marakata (141–152), sphatika (153–158), puṣyarāga (159), vaidūrya (160), gomedā (161), and pravāla (162–165); the work ends with verses on artificial gems and ways of detecting them (174–183).⁴³⁸

NAVARATNAPARĪKṢĀ by Soma.⁴³⁹ The author is said to be the Somadeva who compiled the *Mānasollāsa*, of which work the text of the *Navaratnaparīkṣā* forms part.⁴⁴⁰

NAVARATNARĀJAMṚGĀṆKASIDDHARASANIRMĀṆA.⁴⁴¹

NAVARATNAŚUDDHI.⁴⁴²

NIDHIDARŚANA by Rāmavāṇajapeyin.⁴⁴³

NĪTYANĀTHATANTRA.⁴⁴⁴ This work may be the same as Nityanātha's *Rasaratnākara*.

PAÑCABĀṆAMODAKANIRMĀṆAVIDHI.⁴⁴⁵

PĀRAJĀRĀṆAMĀRAṆĪDIVIDHI.⁴⁴⁶

PĀRAKALPA.⁴⁴⁷ the twenty-eighth chapter of the *Rudrayāmala*,⁴⁴⁸ dealing with the medicinal properties of mercury and the preparation of mercurial medicines.⁴⁴⁹

PĀRAKALPADRUMA by Ananta, written in A.D. 1792.⁴⁵⁰

PĀRADANĀMA.⁴⁵¹

PĀRADASAMHITĀ by Cittodbhava Haṇṣarāja.⁴⁵²

PĀRADAŚODHANAVIDHI.⁴⁵³

PĀRADĀṢṬĀDAŚASAMSKĀRA, anonymous.⁴⁵⁴

PĀRADĀṢṬĀDAŚASAMSKĀRA by Kṛṣṇarāvanarasimha.⁴⁵⁵

PĀRAVIDHI.⁴⁵⁶

PĀRADAYOGAŚĀSTRA by Śivarāmayogīndra,⁴⁵⁷ a work in 262 verses and eleven chapters (paṭala), dealing with processes of making mercurial preparations for medicinal purposes, for conferring longevity, and for converting base metals into gold.⁴⁵⁸ Mentioned as one of the sources of the *Rasayogasāgara*.⁴⁵⁹

This work is sometimes assigned to the sixteenth century.⁴⁶⁰

PĀṢĀṆABHASMAVIDHĀNA.⁴⁶¹

PĀṢĀṆAŚUDDHIKRAMA.⁴⁶²
 PRAMADEBHĀṆKUŚARASAVIDHI.⁴⁶³
 PRĀṆĀṆKUŚARASAVIDHI.⁴⁶⁴
 PRATĀPALAṆKEŚVARARASA.⁴⁶⁵
 PRATĀPALAṆKEŚVARĪNIRMĀṆACIKITSĀVIDHĀNA.⁴⁶⁶
 PRAYOGACINTĀMAṆI by Rāmamāṇikyasena.⁴⁶⁷
 PŪRṆACANDRODAYARASAVIDHĀNA.⁴⁶⁸
 PURUṢĀRTHAPRABODHA.⁴⁶⁹
 RĀJAMṚGĀṆKAVYĀKHYĀ.⁴⁷⁰
 RĀJARATNĀKARA by Dhuṇḍhirāja, son of Vīreśvara alias Pante Bhaṭṭa.⁴⁷¹
 RAJATABHASMAVIDHĀNA.⁴⁷²
 RAJATASUVARṆĀKARAṆAKRIYĀ.⁴⁷³

RASABHAIRAVA by Bhairava.⁴⁷⁴ Bhairava is one of the Rasasiddhas; several rasayogas are attributed to him. He is also credited with the *Gaurikāñcalikātantra* and *Rasendrabhairava*.

RASABHAIṢAJYAKALPADĪPIKĀ.⁴⁷⁵
 RASABHAIṢAJYARATNĀVALI by Sūryakavi.⁴⁷⁶
 RASABHASMANIRMĀṆAKRAMA.⁴⁷⁷
 RASABHASMASĀDHANA.⁴⁷⁸
 RASABHASMAVIDHI.⁴⁷⁹

RASABHEṢAJAKALPA⁴⁸⁰ or *Rasabheṣajakalpadīpikā*⁴⁸¹ by Sūryapaṇḍita. Subjects dealt with are: furnaces, fuels, kinds of earth, processing of mercury, the purification of medicinal substances, perfumed oils, diet.⁴⁸²

RASABHOGAMUKTĀVALI.⁴⁸³
 RASABHŪPATI.⁴⁸⁴
 RASABODHACANDRODAYA.⁴⁸⁵ Used as a source in the *Rasayogasāgara*.⁴⁸⁶

RASACAKRA by Bṛhaspati.⁴⁸⁷ This work, in 8,000 verses, is mentioned in the *Gora-kṣasamhitā*.⁴⁸⁸

RASACAKRACŪḌAMAṆI.⁴⁸⁹

RASACANDĀMŚU or *Rasaratnasamgraha* by Datta Ballāla Borakara, also called Datta Vaidya, a Sārasvata brāhmaṇa, son of Ballāladeva and Lakṣmī. This work is a modern compilation, taken from the *Rasaprakāśāsudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, etc.; it was completed in A.D. 1919. It consists of two parts (khaṇḍa), the first of which deals with śodhana, māraṇa, etc., of the rasas, uparasas, dhātus, upadhātus, etc., while the second one contains formulae to be used in the treatment of various disorders.⁴⁹⁰

RASACANḌĀMŚU by Dattarāma Vaidya.⁴⁹¹

RASACANḌĀMŚU by Dattātreya.⁴⁹² Used as a source in the *Bheṣajasaṃhitā*, *Rasayogasāgara*,⁴⁹³ and *Rasendrasambhava*.

A *Rasacanḍāmśu* is quoted in the *Āyurvedīya Khanijavijñāna*, *Kūpīpakvarasanimānavijñāna*, and *Rasadhātuprakāśa*.

The disease called smaronmāda was known to the author of this work,⁴⁹⁴ which points to a rather late date.⁴⁹⁵

RASACANḌĀMŚU by Śrīsaṃkara.⁴⁹⁶

RASACANDRATANTRA by Bṛhaspati.⁴⁹⁷

RASACANDRIKĀ, anonymous.⁴⁹⁸

RASACANDRIKĀ by Mādhava Kavicandra.⁴⁹⁹

RASACANDRIKĀ by Nīlāmbara Purohita.⁵⁰⁰

RASACANDRODAYA by Candrasena.⁵⁰¹

RASACIKITSĀGRANTHA.⁵⁰²

RASACINTĀMAṆI, anonymous.⁵⁰³

RASACINTĀMAṆI by Anantadeva⁵⁰⁴ or Anantadevasūri,⁵⁰⁵ a work in about 900 verses, arranged in eleven chapters.⁵⁰⁶

The subjects of chapters (stavaka) one to six are:⁵⁰⁷ (1; 120 verses) twenty methods of preparing rasabhasman, gandhakagrāsa, the preparation of various guṭikās; (2; 142 verses) the formulae and uses of seventeen rasayogas; (3; 98 verses) the treatment of kuṣṭha; (4; 128 verses) the treatment of śoṭha and some other disorders; (5; 162 verses) the saṃskāras of mercury; (6; 146 verses) auri- and argentifaction, rasāyana and vājīkaraṇa; (7; 213 verses) eighteen rasayogas; (8; 182 verses) sixteen rasayogas; (9; 198 verses) forty-one rasayogas; (10; 45 verses) thirteen rasayogas; (11; 138 verses) thirty-three rasayogas.

The verses quoted by P. Rāy are concerned with the preparation of a white mercurial bhasman, the extraction of the sattva of rasaka or kharpara (i.e., the preparation of zinc) and tutthaka, and the preparation of artificial gold and silver.⁵⁰⁸

Works quoting the *Rasacintāmaṇi* are: *Aṣṭamahāmātrā*,⁵⁰⁹ *Āyurvedaprakāśa*, Govindarāma's *Rasasaṃgrahasiddhānta*,⁵¹⁰ Gulrājśarmamiśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, *Kūpīpakvarasanimānavijñāna*, Rāmacandra's *Rāmaṇodā*,⁵¹¹ *Rasadhātuprakāśa*, *Rasakāmadhenu*, Sadānanda's *Rasataraṅgiṇī*, *Rasatattvavivecana*, Somadevaśarma's commentary on the *Āyurvedaprakāśa*, Ṭoḍara's *Āyurvedasaukhya*,⁵¹² and Trimalla's *Yogatarāṅgiṇī*⁵¹³ and *Brhadyogatarāṅgiṇī*.⁵¹⁴ The *Rasacintāmaṇi* of Anantadeva was one of the sources of the *Rasayogasāgara*.⁵¹⁵ The *Rasacintāmaṇi* is also mentioned among the sources of the *Pāradasaṃhitā*. The work is anonymously quoted in the *Rasajalanidhi*.

A *Cintāmaṇi*, quoted by Ṭoḍara, may or may not be the *Rasacintāmaṇi*.⁵¹⁶

Anantadeva was a resident of Kanakācala⁵¹⁷ and a devotee of Tripurasundarī.⁵¹⁸

The quotations establish that Anantadeva is earlier than Ṭoḍara.⁵¹⁹

RASACINTĀMAṆI by Muralīdhara Śārman.⁵²⁰

RASACINTĀMAṆI by Padmaṇapaṇḍita.⁵²¹

RASADARPAṆA, anonymous.⁵²² An unspecified *Rasadarpaṇa* is quoted in one of the *pariśiṣṭas* of the *Ānandakanda*,⁵²³ the *Āyurvedīya Khanijavijñāna*, the *Brhadrasarā-jasundara*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmānavijñāna*, *Rasatattvavivecana*, *Rasendrapurāṇa*, Ṭoḍara's *Āyurvedasaukhya*,⁵²⁴ and Trimalla's *Yogatarāṅgiṇī*. A *Rasadarpaṇa* is referred to in Revaṇasiddha's *Vīrabhaṭṭīya*.

RASADARPAṆA by Revaṇasiddha.⁵²⁵ A *Rasadarpaṇa*, quoted in Viṣṇudeva's (= Vi-ṭṭhala's) *Rasasindhu*, is probably Revaṇasiddha's work, because Trimalla, who also wrote a *Rasadarpaṇa*, is much later than Viṣṇudeva. Revaṇasiddha may therefore be earlier than the third quarter of the fourteenth century.

RASADHĀTUPRAKĀŚA by Vaidya P.D. Muḷe.⁵²⁶

The forty chapters (*adhyāya*) of this compilation deal with: (1) *rasaśālā*; (2) *paribhāṣā*; (3) *vargas* (groups of substances); (4) *yantras*; (5) types of *mūṣā* and *mudrā*; *lepa*; types of *koṣṭhī*; (6) types of *puṭa*; (7) *kāñjī*; (8) *māna* (weights and measures); (9) *pāradotpatti* (the origin of mercury), the *doṣas* (blemishes) of mercury; (10) *pāraśuddhi* (the purification of mercury) and the *saṃskāras*; (11) *gandhakajāraṇa*, *hiṅgulotthapāradaniḥsāraṇavidhi* (the extraction of mercury from cinnabar); (12) *mūrchanā*; (13) *nirgandhamūrchanā*: *mugdharasa*, *rasakarpūra*; (14) *sagandhamūrchanā*: *kajjalī*, *rasasindūra*, *candrodaya*; (15) *kajjalī*, *parpatī*; (16) *suvarṇajāraṇā*; (17) *rasabandha*; (18) *pāradabhasman* and its uses; (19) *lohasiddhi* and *suvarṇanirmāṇa* (*aurifaction*); (20) the *dhātus* (metals); (21) *suvarṇa* (gold); (22) *rajata* (silver); (23) *tāmra* (copper); (24) *loha* (iron); (25) *maṇḍūra*; (26) *nāga* (lead); (27) *vaṅga* (tin); (28) *yaśada* (zinc); (29) *pittala*, *kāṃsya*, *varta*; (30) the *mahārasas*; (31) *abhraka*; (32) *vaikrānta*; (33) *suvarṇamākṣika*; (34) *tāramākṣika*; (35) *vimala*; (36) *śilājatu*; (37) *sasyaka*; (38) *capala*; (39) *rasaka*; (40) the *uparasas*.

The sources used in compiling this treatise are: *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāratabhaiṣajyaratnākara*, *Bhāvaprakāśa*, *Nighaṇṭurātṇākara*, *Rasacandāmaṇḍu*, *Rasacintāmaṇi*, *Rasahīdaya*, *Rasakāmadhenu*, *Rasaprakāśasudhākara*, *Rasaramāṅkara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasatarāṅgiṇī*, *Rasāyanasāra*, *Rasendrasārasaṃgraha*, *Śāligrāmanighaṇṭu*, *Suśruta*, *Ṭoḍarānanda*, *Viṣatantra*, and *Yogarātṇākara*.

RASADHĀTUŚODHANAMĀRANA.⁵²⁷

RASĀDHĪKĀRA by Harihara.⁵²⁸

RASĀDHYĀYA by Puruṣottamasūri.⁵²⁹

RASĀDĪNĀM MĀRAṆAJĀRANĀDIPRAYOGAḤ. This work is a guide for the purification of mercury and other substances; it is composed in verse and prose.⁵³⁰

RASĀDĪPA by (Siddha) Prāṇanātha.⁵³¹

RASADĪPAKA.⁵³²

RASADĪPIKĀ, anonymous.⁵³³

RASADĪPIKĀ by Ānandānubhava.⁵³⁴ Ānandānubhava⁵³⁵ and the *Rasadīpikā* are quoted in the *Rasasindhu*, which establishes that the author lived before the third quarter of the fourteenth century. Mentioned as one of the sources of the *Rasayogasāgara*.⁵³⁶

RASADĪPIKĀ by Ananta.⁵³⁷ Quoted in the *Rasakaumudī* of Mādhavabhiṣaj.⁵³⁸ A *Rasadīpikā* is cited in the commentary on the *Aṣṭunahāmātrā*,⁵³⁹ the *Kūpīpakvarasanirmāṇavijñāna*, *Rasasindhu*, Ṭoḍara's *Āyurvedasaukhya*, and Vaidyarāja's *Sukhabodha*.⁵⁴⁰

RASADĪPIKĀ by Rāmarāja.⁵⁴¹ The same author is credited with a *Nāḍiprakāśa* and *Rasaratnapradīpa*.⁵⁴² Quoted in Vaidyacinātmaṇi's *Prayogāmṛta*.⁵⁴³

RASĀDĪŚUDDHI.⁵⁴⁴

RASĀDIYOGAGRANTHA. This work deals with the purification of mercury and other inorganic substances; a number of medicinal preparations are described.⁵⁴⁵

RASADRUTIPRAKARAṆA.⁵⁴⁶

RASĀDYUTPATTIVARṆANA.⁵⁴⁷

RASAGOVINDA by Govinda.⁵⁴⁸

RASAGRANTHA. This work describes the origin and properties of mercury and its different varieties; its use in medicinal preparations is also indicated.⁵⁴⁹

RASAHEMAN.⁵⁵⁰

RASAHṚDAYA, anonymous.⁵⁵¹

RASAJÑĀNA by Jñānajatya.⁵⁵² Quoted in the *Bhaiṣajyaratnāvalī*⁵⁵³ and *Kūpīpakvarasanirmāṇavijñāna*. The *Rasajñāna* is one of the sources of the *Rasayogasāgara*.⁵⁵⁴

Jñānajatyotirmunīndra is referred to in Dattarāma's *Bṛhadarasarājasundara*.⁵⁵⁵

RASAKAKṢĀPUṬA by Nāgeśa, son of Gannirāja of Bhāradvājagotra and Vaikhānasasūtra.⁵⁵⁶ The author gives at the beginning of his treatise a list of the following authorities and works consulted by him: Bhavānī,⁵⁵⁷ Carpaṭi, Dhanvantari, Govinda, Jinendra's *Amṛta*,⁵⁵⁸ *Kākacāṇḍeśvarīmata*, Lokanāyaka,⁵⁵⁹ Nāgārjuna, Nīrandhra,⁵⁶⁰ *Pīyūṣa*, *Rājamṛgāṅka*, *Rasadīpikā*, *Rasāmṛta*, *Rasarāja*, *Rasaratnākara*, *Rasārṇava*, *Rasasattva*, *Rasasiddha*, *Rasendramāṅgala*, *Sutasoma*,⁵⁶¹ *Svacchanda*, *Tārkyā*,⁵⁶² *Vyādi*, and *Vyāsa*.⁵⁶³

RASAKALIKĀ.⁵⁶⁴

RASAKALPA⁵⁶⁵ This work, said to form part of the *Rudrayāmala*, and written in the form of a dialogue between Śiva and Caṇḍikā, describes metals and minerals, their killing, druti, sattvapātana and some other processes, without giving attention to the medicinal uses of the substances produced. The author claims to have tested all the processes outlined in the work. Six metals are distinguished (gold, silver, copper, tin, lead, iron), eight mahārasas (pārada, hīṅgula, vaiṣṇava,⁵⁶⁶ śasyaka, śaila, capala, rasaka, amala),⁵⁶⁷ eight rasas (abhraka, tutthaka, kānta, rājāvarta, añjana, vajra, vaikrāntaka, ṭaṅkaṇa), and an unspecified number of uparasas (gandhaka, tālaka, śilā, kṣiti,⁵⁶⁸ khecara,⁵⁶⁹ gairika, etc.). Sulphur (gandhaka) is said to be of four types (sita, asita, aruṇa, pīta), tālaka of two types (godanta and pāṭalacchavi), śilā of two types (raktā and pītā), kāsīsa of three types (kāsīsa, puṣpakāsīsa, hīrakāsīsa), gairika of two types (sauvarṇa and lohita). Kaṅkuṣṭha is not accepted as a rasa. The extraction of the essence of rasaka, i.e., the preparation of zinc, is described.⁵⁷⁰

Svacchandabhairava and Govinda are referred to.⁵⁷¹

The *Rasakalpa* is sometimes placed in the thirteenth century.⁵⁷²

RASAKALPA by Basava.⁵⁷³

RASAKALPADRUMA by Jayadeva.⁵⁷⁴

RASAKALPALATĀ, anonymous.⁵⁷⁵

RASAKALPALATĀ by Kāśīnātha.⁵⁷⁶

RASAKALPALATĀ by Magnīrāma,⁵⁷⁷ Magnīrāma,⁵⁷⁸ or Maganīrāma.⁵⁷⁹ Mentioned as one of the sources of the *Rasayogasāgara*.⁵⁸⁰ This work is sometimes assigned to the sixteenth century.⁵⁸¹

RASAKALPALATĀ by Nārāyaṇamiśra⁵⁸² or Nārāyaṇa Śarman.⁵⁸³ This work is sometimes placed in the fifteenth century.⁵⁸⁴

RASAKALPATARU.⁵⁸⁵

RASAKALPAVALLĪ by Śrīkrṣṇasena.⁵⁸⁶

RASAKAṆKĀLĪ by Kaṅkāli.⁵⁸⁷

RASAKAṆKĀLĪYA by Kaṅkālayogin.⁵⁸⁸ This work is one of the sources of the *Rasayogasāgara*.⁵⁸⁹ The *Rasakaṅkāliya* is quoted in the *Kūṭipakvarasanirmānavijñāna*.

RASĀKARA.⁵⁹⁰

RASAKARPŪRA.⁵⁹¹

RASAKAṢĀYA by Vaidyarāja, son of Viśārada.⁵⁹²

RASAKAUMUDĪ, anonymous.⁵⁹³ An unspecified *Rasakaumudī* is quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Kūṭipakvarasanirmānavijñāna*, and the *Rasāyanasamgraha*.

RASAKAUMUDĪ by Golhadeva.⁵⁹⁴

RASAKAUMUDĪ by Mādhava.⁵⁹⁵ This work deals with rasayogas employed in medicine; some of the chapters (adhikāra) are concerned with the treatment of jvara, jvarātīsāra, grahaṇī, viṣphota, masūrī, mukharoga, śīroroga, strīroga, bālaroga, and viṣa, as well as with vṛṣya (= vājīkaraṇa); the saṃskāras of mercury and the yantras used are described; some gaṇas are enumerated: niyāmaka-, rasamāraka-, guḍūci-, pañcapitta-, amla-, and kṣāragāṇa.⁵⁹⁶

Mādhava's *Rasakaumudī* is assigned to the sixteenth century, because of its similarity to the *Rasapradīpa* in many respects, while, moreover, opium and mineral acids are prescribed in it.⁵⁹⁷ P. Cordier, who examined a MS of the work, noticed quotations from the *Rasaratnākara* and Ānandānubhava's *Rasadīpikā*.⁵⁹⁸

RASAKAUMUDĪ by Śaktivallabha.⁵⁹⁹ This work is one of the sources of the *Rasayogasāgara*.⁶⁰⁰

RASAKAUMUDĪ by Viṭṭhala.⁶⁰¹

RASAKAUSTUBHA.⁶⁰²

RASAKAUTUKA, anonymous.⁶⁰³

RASAKAUTUKA by Mallāri.⁶⁰⁴

RASAKAUTUKĀKHYA.⁶⁰⁵

RASAKETU.⁶⁰⁶

RASAKINNARA.⁶⁰⁷ Used as a source in the *Rasayogasāgara*.

RASALAKṢAṆAMAÑJARĪ by Kṣaṇimaṇīlakṣmaṇa.⁶⁰⁸

RASALAKṢAṆĀNI.⁶⁰⁹

RASALAKṢAṆAŚĀSTRA.⁶¹⁰

RASĀLAṂKĀRA, anonymous.⁶¹¹ An unspecified *Rasīlaṃkāra* is quoted in the *Kūpīpakvarasanirmāṇavijñāna*, *Rasakāmadhenu* and Ṭoḍara's *Āyurvedasaukhya*; ⁶¹² it is one of the sources of the *Pāradasaṃhitā*.

RASĀLAṂKĀRA by Govinda, son of Nṛhari and follower of Lakṣmīnṛsiṃha.⁶¹³

RASĀLAṂKĀRA by Rāmavīrabhaṭṭa.⁶¹⁴

RASĀLAṂKĀRA by Rāmeśvarabhaṭṭa.⁶¹⁵ Used as a source in the *Rasayogasāgara*.⁶¹⁶ This work is sometimes placed in the fourteenth century.⁶¹⁷

RASALEHYAVIDHĀNA.⁶¹⁸

RASAMĀLĀ.⁶¹⁹

RASAMĀNASA by Dayārāma, son of Devakīnandana.⁶²⁰ The *Rasamānasa* is quoted in the *Pāradasaṃhitā* and *Rasatattvavivecana*.

RASAMAṆGALA by Gahanānandamuni.⁶²¹

Numerous rasayogas are ascribed to Gahana,⁶²² Gahanānanda,⁶²³ Gahanānandanātha,⁶²⁴ and Gahananātha.⁶²⁵

The *Rasamaṅgala*⁶²⁶ is quoted in the commentary on the *Aṣṭamahāmātrā*,⁶²⁷ in the *Capalanirṇaya* (by Narendranāthamitra) of the *Rasataraṅgiṇī*, and in the *Rasendrakalpadruma*. The work is referred to in Nityanātha's *Rasaratnākara*.

Gahananātha is quoted in Mādhava Kavirāja's *Mugdhabodha*.

A *Yogaratnākara* is attributed to Gahananātha.

Gahanānandanātha was the guru of Cidghanānandanātha, the author of the *Satka-rmasaṅgraha*.⁶²⁸

RASAMANI by Harihara.⁶²⁹

RASAMAÑJARĪ, anonymous.⁶³⁰

RASAMAÑJARĪ by P.T. Nārāyaṇan Mūs (1870–1907).⁶³¹

RASAMĀRAṆAVIDHI.⁶³²

RASAMĀRGA.⁶³³

RASAMĀRTAṆḌA. This work mentions the following seventeen saṃskāras of mercury: paṭṭasāraṇa, malāpakarṣaṇa, sveda, śuddhi, mardana, dhāvana, mūrchanā, utthāpana, tiryakpātana, ūrdhwapātana, adhaḥpātana, śuci, vīryānayaṇa, niyāmana, nirodhaṇa, dīpana, lehiṇa, and mukhīkaraṇa.⁶³⁴

The *Rasamārtaṇḍa* is quoted in Guṛājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Kūpipakvarasanirmāṇavijñāna*, the *Rasatattvavivecana*, and Somadeva-śarman's commentary on the *Āyurvedaprakāśa*.

RASĀMRṬA, anonymous.⁶³⁵ An unspecified *Rasāmṛta* is quoted in the *Bheṣajasaṃhitā*, *Bhāvaprakāśa*,⁶³⁶ Guṛājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Pāradasaṃhitā*, *Rasakāmadhenu*, *Rasasindhu*, and *Rasendrakalpadruma*.

RASĀMRṬA by Jayadevakavirāja.⁶³⁷

RASĀMRṬA by Jayanācārya.⁶³⁸

RASĀMRṬA by Kāmadeva.⁶³⁹

RASĀMRṬA by Kayyadevapaṇḍita.⁶⁴⁰

RASĀMRṬA by Rāmeśvara.⁶⁴¹

RASĀMRṬA by Vaidyakendraṇḍita.⁶⁴²

RASAMUKTĀVALĪ, a treatise on metals and their medicinal properties.⁶⁴³ A *Rasamuktāvalī* was written by Devanātha,⁶⁴⁴ the teacher of Cūḍāmaṇiśra, the author of the *Rasakāmadhenu*. The latter gives an extract from his teacher's work without mentioning its title.

Devanātha's *Rasamuktāvalī* is quoted by his son, Vāsudeva, in the latter's commentary on Subandhu's *Vāsavadattā*.⁶⁴⁵ Devanātha and Vāsudeva were Śākadvīpīya brāhmaṇas.⁶⁴⁶

An unspecified *Rasamuktāvalī* is quoted in the *Rasasindhu* and was one of the sources of the *Rasayogasāgara*.⁶⁴⁷

Devanātha's *Rasamuktāvalī* is obviously earlier than the *Rasakāmadhenu*. P.K. Gode placed it tentatively in the period between A.D. 1500 and 1672.⁶⁴⁸ The

Rasamuktāvalī quoted in the *Rasasindhu* cannot be Devanātha's work, on account of the much earlier date of Viṭṭhala, the author of the *Rasasindhu*.

RASAMŪLIKĀNIGHAṆṬU:⁶⁴⁹ a description of particular plants used in alchemical processes.

RASANAḢṢATRAMĀLIKĀ by Mathanasimha,⁶⁵⁰ physician to the king of Mālvā.⁶⁵¹ Two formulae from this work are found in P. Rāy;⁶⁵² the first formula mentions opium, the second is a svacchandabhairavarasa.⁶⁵³ Mathanasimha's treatise is probably quoted as *Nakṣatramālā* in Ṭoḍara's *Āyurvedasaukhya* and Viṭṭhala's *Rasasindhu*.⁶⁵⁴ Viṭṭhala's quotation points to a date earlier than the third quarter of the fourteenth century.⁶⁵⁵ One of the MSS was completed in A.D. 1500/1501.⁶⁵⁶

RASĀNANDAKAUTUKA by Naravāhana.⁶⁵⁷ Naravāhana is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasa jalaniḍhi*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Rasendrasambhava*.⁶⁵⁸

RASANIBANDHA.⁶⁵⁹

RASANIDĀNA.⁶⁶⁰

RASANIGHAṆṬU.⁶⁶¹

RASANIRMĀṆAVIDHĀNA.⁶⁶²

RASANIRMĀNAVIDHI.⁶⁶³

RASANIRŪNAYA.⁶⁶⁴

RASĀṆKUŚA.⁶⁶⁵

RASĀṆKUŚATANTRA by Candranātha.⁶⁶⁶ Candra's *Rasāṅkuśa*, a work in 10,000 verses, is mentioned in the *Goraḡṣasaṃhitā*.⁶⁶⁷ A *Rasāṅkuśa* is quoted in the *Āyurvedasaukhya*.⁶⁶⁸ Several rasayogas are attributed to Candranātha.

RASAPADDHATĪ, anonymous.⁶⁶⁹ Quoted in the *Pāradasaṃhitā*.⁶⁷⁰

RASAPADDHATĪ by Bhairavaprasāda.⁶⁷¹

RASAPADMACANDRIKĀ.⁶⁷²

RASAPARAMACANDRIKĀ.⁶⁷³

RASAPĀRIJĀTA, anonymous.⁶⁷⁴ An unspecified *Rasapārijāta* is one of the sources of the *Āyurvedīya Khanijavijñāna*, *Pāradasaṃhitā*, and *Rasayogasāgara*.⁶⁷⁵

RASAPĀRIJĀTA by Lakṣmīdhara Sarasvatī.⁶⁷⁶

RASAPĀRIJĀTA by Rāmacandra.⁶⁷⁷

RASAPĀRIJĀTA by Vaidya Śiromaṇi.⁶⁷⁸

RASAPRABANDHA.⁶⁷⁹

RASAPRABANDHACANDRODAYA by Bīśaladeva.⁶⁸⁰

RASAPRABHEDANIRŪPAṆA.⁶⁸¹

RASAPRABODHA by Nāgadeva, son of Mallideva.⁶⁸²

Maṅgalagirisūri, son of Jagannātha of Ātreya gotra, of the Gelavaṅgalavamśa,

wrote a commentary on the first chapter.⁷⁰⁵ He is also the author of a commentary on the *Bheṣajakalpa* attributed to Bharadvāja.⁷⁰⁶

This work is apparently identical with the *Rasapradīpikā* attributed to Bharadvāja.

RASAPRADĪPIKĀ by Bharadvāja.⁷⁰⁷ This work consists of four chapters (adhyāya), devoted to: (1) mercury and its processing; (2) the mahārasas (vaikrānta, māṅṣika, śilādhātu = śilājatu, sasyaka, capala, rasaka), uparasas (gandhaka, gairika, kāsīsa, saurāṣṭra, haritāla, manaḥśilā, añjana, kaṅkuṣṭha), sādharmaṇarasas (kampilla, gaurīpāṣāṇa, navasāra, varāṭaka, bodāraśṛṅgi, hīṅgula), the purification of opium (ahiphena), vatsanābha, nepāla, and mahiṣākṣa; (3) the nine gems (māṇikyā, mauktika, pravāla, marakata, puṣparāga, vajra, nīla, vaiḍūrya, gomedaka); (4) the nine metals.⁷⁰⁸

The main source of the *Rasapradīpikā* was the *Rasaratnasamuccaya*, though the arrangement of the subjects differs.

Part of a commentary, namely the commentary on the first chapter, by Maṅgalagiri Sūri, son of Jagannātha, of the Gelavaṅgalavaṃśa, has been preserved.⁷⁰⁹

A Telugu version of the *Rasapradīpikā* was made by Muḍumba Venkaṭācārya, who does not refer to Bharadvāja as its author, but presents the work as an instruction of Ātreya by Agastya, in accordance with revelations by the Aśvins to Dhanvantari.⁷¹⁰

The *Rasapradīpikā* is later than the sixteenth century, on account of the date of the *Rasaratnasamuccaya*, its chief source, and earlier than the eighteenth century, the period in which Muḍumba lived.⁷¹¹

RASAPRADĪPIKĀ by Maṅgalagirisūri.⁷¹²

RASAPRAKĀŚA, anonymous.⁷¹³ A *Rasaprakāśa* is one of the sources of the *Pāradasaṃhitā*.

RASAPRAKĀŚA by Kṛṣṇaśarman.⁷¹⁴

RASAPRAKĀŚA by Mūlarāja.⁷¹⁵

RASAPRAYOGA.⁷¹⁶

RASAPRAYOGA by Somaprabhācārya.⁷¹⁷

RASARAHASYA by Dayārāma, son of Devakīnandana.⁷¹⁸ This work is quoted in Mādhava's *Sarvadarśanasamgraha*,⁷¹⁹ the *Rasakāmadhenu*, the *Rasasindhu*, and Ṭoḍara's *Āyurvedasaṃkhyā*. It is one of the sources of the *Pāradasaṃhitā*.

The reference to the *Rasarahasya* in the *Rasasindhu* establishes that Dayārāma lived before the third quarter of the fourteenth century.

RASARĀJA, anonymous.⁷²⁰ Quoted in the *Bṛhadrasarājasundara*.

RASARĀJA by Lakṣmīśvara.⁷²¹

RASARĀJA by Matirāma.⁷²²

RASARĀJA by Śaṃkara.⁷²³ Śaṃkara is one of the Rasasiddhas in the *Rasatarāṅgīnī* and *Rasendrasambhava*. Several rasayogas are ascribed to him. He is also credited with a

Rasaratnasamuccaya and *Rasaśaṅkara*.

RASARĀJAHAMSA, anonymous.⁷²⁴ Quoted in the *Pāradasaṅhitā*, *Rasakāmadhenu* and Ṭoḍara's *Āyurvedasaukhya*. The *Rājahaṃsa*, quoted by Ṭoḍara, may be the same work.

RASARĀJAKALPA.⁷²⁵

RASARĀJAKALPALAKṢMĪ by Viṣṇu Paṇḍita, son of Mahādeva.⁷²⁶ This work is undoubtedly identical with Viṣṇudeva's *Rasarājalakṣmī*.

RASARĀJALAKṢMĪ, anonymous.⁷²⁷ A work of this title is one of the sources of the *Pāradasaṅhitā*; it is quoted in the *Rasakāmadhenu*⁷²⁸ and Ṭoḍara's *Āyurvedasaukhya*.⁷²⁹

RASARĀJALAKṢMĪ by Rāmeśvarabhaṭṭa.⁷³⁰ This work describes the purification and the properties of mercury.⁷³¹

Rāmeśvarabhaṭṭa was the son of Viṣṇudeva, who wrote the *Rasarājalakṣmī*; he can therefore be placed in the latter half of the fourteenth century. He is regarded as the author of a commentary on his father's work.⁷³²

RASARĀJALAKṢMĪ by Revanāsiddha.⁷³³

RASARĀJALAKṢMĪ by Sarvajñabhaṭṭa.⁷³⁴

RASARĀJAMAHODADHI by Kapālin.⁷³⁵ A *Rasarājamahodadhi* was one of the sources of the *Rasavidyāmahārṇava*.

RASARĀJAMṚGĀṆKA by Bhojarāja.⁷³⁶

RASARĀJAPRAKARANA by Mādhava Upādhyāya.⁷³⁷

RASARĀJAŚAṆKARA, anonymous.⁷³⁸ A *Rasarājaśaṅkara* is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmāṇavijñāna*, and the *Pāradasaṅhitā*.

RASARĀJAŚAṆKARA by Rāmakṛṣṇa, son of Mudgala,⁷³⁹ great-grandson of Kamalākara, pupil of Devendravana.⁷⁴⁰ This treatise in nine chapters (*alaṃkāra*)⁷⁴¹ deals with alchemical procedures and the treatment of diseases.⁷⁴² It is one of the sources of the *Rasayogasāgara*.⁷⁴³ The work is sometimes assigned to the fifteenth century.⁷⁴⁴

RASARĀJASAMSKĀRĀḤ.⁷⁴⁵

RASARĀJAŚEKHARĀ by Gaṅgādhara.⁷⁴⁶

RASARĀJAŚIROMAṆI by Paraśurāma.⁷⁴⁷ Mentioned as one of the sources of the *Rasayogasāgara*.⁷⁴⁸ An unspecified *Rasarājaśiromaṇi* is quoted in the *Kūpīpakvarasanirmāṇavijñāna*.

RASARĀJAŚIROMAṆI by Revaṇa Siddha.⁷⁴⁹

RASARĀJASUDHĀNIDHI by Vrajarāja Śukla.⁷⁵⁰

RASARAṆJANA.⁷⁵¹

RASARASĀRṆAVA.⁷⁵²

RASARATNA by Śrīnātha.⁷⁵³

RASARATNADĪPIKĀ, unspecified. Quoted in the *Rasakāmadhenu*, *Pāradasaṃhitā*, and Somadevaśārman's commentary on the *Āyurvedaprakāśa*. A *Ratnadīpikā* is cited in Tṛḍara's *Āyurvedasaukhyā*.

RASARATNADĪPIKĀ by Mallarāja.⁷⁵⁴

RASARATNĀKARA, anonymous.⁷⁵⁵

RASARATNĀKARA by Ādinātha.⁷⁵⁶ Ādinātha is one of the Mahāsiddhas in the *Haṭha-yogapradīpikā* (1.5).⁷⁵⁷ He is also mentioned as the first of the nine Nāthas⁷⁵⁸ and the first of twelve sages to whom the Kāpālika doctrine was revealed.⁷⁵⁹

RASARATNĀKARA by Cakrapāṇi.⁷⁶⁰

RASARATNĀKARA by Devacandra.⁷⁶¹

RASARATNĀKARA by Devācārya.⁷⁶²

RASARATNĀKARA by Nāgārjuna.⁷⁶³ Actually, this work does not exist; the work recorded in this way is Nāgārjuna's *Rasendramaṅgala*.⁷⁶⁴

RASARATNĀKARA by Nāthasirṇha.⁷⁶⁵ This work is probably identical with Nityanātha's *Rasaratnākara*.

RASARATNĀKARA by Pūjyapāda.⁷⁶⁶

RASARATNĀKARA by Rāmacandra.⁷⁶⁷

RASARATNĀKARA by Revaṇasiddha.⁷⁶⁸

RASARATNĀKARA by Saidapahāra, a treatise written in Hindī.⁷⁶⁹ The author was a son of Saidā Hamajā, probably a Muslim and a ḥakīm.⁷⁷⁰

RASARATNĀKARA by Śukrapāṇi.⁷⁷¹

RASARATNĀKARA by Suśruta.⁷⁷²

RASARATNAKĀUMUDĪ, anonymous.⁷⁷³ A text of this title was one of the sources of the *Rasayogasāgara*.⁷⁷⁴ Syphilis (phiraṅga) is mentioned in this work.⁷⁷⁵

RASARATNAMĀLĀ, anonymous.⁷⁷⁶ An unspecified alchemical *Ratnamālā* is quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

RASARATNAMĀLĀ by Hari Vaidya of Gurjaradeśa, father of the Devadatta who, in

about the latter part of the fourteenth century, composed a small work called *Ratnamālikā*.⁷⁷⁷

RASARATNAMĀLĀ by Narasiṃha Kavirāja, the guru of Vaidyacintāmaṇi.⁷⁷⁸
RASARATNAMĀLĀ by Siddha Nityanātha.⁷⁷⁹

RASARATNAMĀNIMĀLĀ by Bābābhāi Vaidya.⁷⁸⁰ Used as a source in the *Rasayogasāgara*.⁷⁸¹ Quoted in the *Kūṭīpakvarasanirmāṇavijñāna*. The work is sometimes assigned to the nineteenth century.⁷⁸²

RASARATNAPRADĪPA, anonymous.⁷⁸³ An unspecified *Rasaratnapradīpa* is one of the sources of the *Pāradasaṃhitā*.

RASARATNAPRADĪPA by Jaṅg Bahādur.⁷⁸⁴

RASARATNAPRADĪPA by Kāmeśvara.⁷⁸⁵

RASARATNAPRADĪPA by Rājarāv.⁷⁸⁶

RASARATNAPRADĪPA by Rāmarāja.⁷⁸⁷ This treatise consists of five chapters (adhikāra), dealing with (1) the processing of mercury and the purification and killing of the dhātus, etc., (2–5) rasas and their uses in medicine. The work ends with nāḍiparīkṣā. The arrangement of the diseases agrees with the *Mādhavanidāna*.

The preparation of mineral acids is described in this work.⁷⁸⁸

Sources mentioned by Rāmarāja (1.10) are: Bhagavadgovinda (probably the author of the *Rasaḥṛdaya*), *Bhavānīmata*, Dāmodara, *Īśaḥṛdaya*,⁷⁸⁹ *Jalasudhāmbhodhi*,⁷⁹⁰ *Kākaçaṇḍeśvarīmatatantra*,⁷⁹¹ *Nāgārjuna*, *Saṃsṛtisūtra*,⁷⁹² *Sūtamahodadhi*, *Svacchandaśaktiyāgama*, *Vāsudeva*, and *Vyāḍi*.⁷⁹³

The *Rasaratnapradīpa* is quoted in Bhāvamiśra's *Bhāvaprakāśa*, the *Rasakāmadhenu*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Ṭoḍara's *Āyurvedasaṃhita*, Trimalla's *Yogatarāṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, Vāgbhaṭa's *Rasaratnasamuccaya*, and the *Yogaratanākara*. It is cited as *Rasaratnadīpikā* in the *Rasayogasāgara*, as *Rasaratnapradīpikā* in the *Rasakāmadhenu*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

The *Rasaratnapradīpikā* is also one of the sources of the *Kūṭīpakvarasanirmāṇavijñāna* and *Rasendrasambhava*. The *Ratnapradīpa*, quoted in Trimalla's *Bṛhadyogatarāṅgiṇī*, the *Vaidyakaśāroddhāra*, and the *Yogaratanākara*, and the *Rasaratnadīpa* of the *Amṛtasāgara* may be identical with Rāmarāja's *Rasaratnapradīpa*. The *Ratnadīpikā* ascribed to Rāmarāja⁷⁹⁴ is probably the same work as the *Rasaratnapradīpa*.

Rāmarāja is also credited with a *Rasādīpikā*⁷⁹⁵ and *Nāḍīprakāśa*⁷⁹⁶ or *Nāḍīparīkṣā*.⁷⁹⁷

Information on the author and his genealogy is found in the introductory verses (1.4–9). Rāmarāja descends from a king called Hariścandra, who reigned at Kāṣṭhā on the banks of the Yamunā. Hariścandra's son was Sādhāraṇa. This Sādhāraṇa had three sons: Lakṣmaṇasiṃha, Sahaajāpāla, and Madana.⁷⁹⁸ Rāmarāja was the son of king Ratnapāla,⁷⁹⁹ a descendant of Madana.

The *Rasaratnapradīpa* was written at the request of someone called Sādhārāṇa, who may have been an elder brother of Rāmarāja.⁸⁰⁰

Dates assigned to Rāmarāja are:⁸⁰¹ between A.D. 1200 and 1500,⁸⁰² approximately A.D. 1350,⁸⁰³ the fifteenth century,⁸⁰⁴ A.D. 1420,⁸⁰⁵ the fifteenth or sixteenth century,⁸⁰⁶ and the seventeenth century.⁸⁰⁷

Rāmarāja should probably be placed in the period A.D. 1400–1550, since he is later than his ancestor Madanapāla and earlier than Bhāvamiśra, who quotes his *Rasaratnapradīpa*.

RASARATNAPRADĪPIKĀ, anonymous.⁸⁰⁸

RASARATNASAMUCCAYA, anonymous.⁸⁰⁹

RASARATNASAMUCCAYA by Bhaṭṭācārya, son of Nṛpaśiṃha Gupta.⁸¹⁰

RASARATNASAMUCCAYA by Lokanātha.⁸¹¹

RASARATNASAMUCCAYA by Māṇikyadevasūri.⁸¹²

The author calls his work *Rasāmṛtaśrī* in the introductory verses (1.4) and *Rasaratnasamuccaya* at the end; the colophons refer to it as *Rasāmṛtaśrī*. The treatise deals with alchemical operations and the uses of alchemical preparations for medicinal purposes. It is written in Sanskrit verse of various metres,⁸¹³ and is accompanied by explanations in prose. The treatise consists of 146 stanzas, arranged in three chapters (adhikāra).

The subjects of chapter one (rasāṅgaśaṃgrahī; 50 verses) are: maṅgala and introduction (1–4); the mahārasas: vaikrānta, amala (= abhraka), sasyaka, adri (= śilājatu), mākṣīka, and ahi⁸¹⁴ (5);⁸¹⁵ the uparasas: kaṅkuṣṭha, gandha (sulphur), añjana, gairika, mṛd (= saurāṣṭrī), (manah)śilā, and ālaka (= haritāla) (5);⁸¹⁶ the dhātus: tāmra (copper), tāra (silver), pittala (brass), nāga (lead), heman (gold), vaṅga (tin), tīkṣṇa (iron), kārṇasyaka (bronze), and vaṭṭaloḥa (an alloy) (6);⁸¹⁷ the poisonous substances (7); the eight kinds of bile (pitta; 8); the kinds of animal fat (vasā; 8); the pīta-, aruṇa- (= rakta-), sita- (= śveta-), and asitavargas (9); the eight oils of vegetable origin and some ghees (10); the three naisargikadoṣas of mercury: mala, śikhin, viṣa (12); some saṃskāras and related operations (14–26); the purification of mahārasas and alparasas (= uparasas) (27–31); the killing of the metals (32–39); the killing of the black variety of mica (kṛṣṇābhraka; 40–46); the killing of diamonds and other gems (47–48).

Chapter two (rasarahasya; 40 verses) extols the medicinal qualities of alchemically prepared drugs (1–11); a number of rasayogas are described: saṃnipātaripurasa (12–14), vajrahemaraśa (17–21), bhūtabhairavarasa (26), bṛhadvaḍavānalarasa (27), a guṭikā (28), vāḍavīguṭikā (29), cintāmaṇirasa (30–34), kanakavaḍjarasa (35–37), and chandabhairavarasa (38–39); some yantras (15–16: kacchapa- and bhūdharayantra) and the cakramūṣā (22–25) are discussed too.

Chapter three (56 verses) is concerned with the following rasayogas: tāmrabhairavarasa (4–9), sudhāsūta (10–12), jvarārirasa (13), some other rasas (16–32), hiraṇyagarbharasa (33–39), nāgendarasa (40–41), viśveśvarasa (42), agnikumāraraśa (43–49), and mahābhairavarasa (50–56).

The passages in prose give synonyms of the substances and plants mentioned (ad

1.34, 35, 36–37, 39, 41, 43; 2.30) or details concerning the preparation of particular rasayogas (ad 2.17–21, 28, 29, 30–32; 3.4–5, 18, 19, 24–25, 26, 30, 54–55, 56).

Authorities referred to are Govinda and Vyāḍi (2.6).

Sources mentioned are the *Rasārṇava* and *Rasāvaloka* (2.6). *Rasarahasayodadhi* and *Rasopaniṣad*, mentioned at the end of chapter two (2.40) may also be titles of works consulted by the author.

A cakramūṣā, not known from other treatises, is described (2.22–25) and referred to (2.20; prose ad 2.17–21). A mathākhyayantra, otherwise unknown, is mentioned (2.13). The author was acquainted with the agniṣomābhidhayantra (3.50).⁸¹⁸

The author mentions his name as Māṇikyadeva in the introductory verses (1.4), at the end of chapter one (1.50), and at the end of the work; he refers to himself as Māṇikyendu at the end of chapter two (2.40).

The name of his teacher, Devacandra, appears at the end of chapters one and three. Another instructor may have been Pārśvadevasūri (1.4).

Māṇikyadeva was a Jain, as is evident from the maṅgala verses, addressed to the Tīrthaṅkaras Ṛṣabha and Neminātha (= Ariṣṭanemi), a verse about ahiṃsā (1.11), and the colophons.

J.C. Sikdar⁸¹⁹ asserts that the author belonged to the Vaṭagaccha of Śvetāmbara Jains and was the pupil of Devasūri or Devacandrasūri, the second ācārya of the Vaṭagaccha.

J.C. Sikdar is of the opinion that Māṇikyadeva lived from A.D. 1268 to 1327.⁸²⁰ The same author assigned Māṇikyadeva to the sixteenth century in an earlier article.⁸²¹ He regards him as identical with the Māṇikyacandra who composed the mahākāvya *Nalāyana* or *Kuberapurāṇa*.⁸²²

RASARATNASAMUCCAYA by Nityānanda(?).⁸²³

RASARATNASAMUCCAYA by Nityanāthasiddha.⁸²⁴ The attribution of this work to Nityanātha may be based on a confusion with the *Rasaratnākara*.⁸²⁵

RASARATNASAMUCCAYA by Śaṅkara.⁸²⁶ Śaṅkara is also credited with a *Rasarāja*.

RASARATNASAMUCCAYA by Siddharātri(?).⁸²⁷

RASARATNASAMUCCAYA by Somadeva.⁸²⁸

RASARATNASĀRA by Vyāsalakṣmīdhara, son of Someśvara.⁸²⁹

RASARATNASĀRASAMGRAHA.⁸³⁰

RASARATNĀVALĪ, unspecified.⁸³¹

RASARATNĀVALĪ by Bhāgīratha.⁸³²

RASARATNĀVALĪ by Candrarājākavi.⁸³³

RASARATNĀVALĪ by Gurudattasiddha.⁸³⁴

RASĀRṆAVA by Nāgārjuna.⁸³⁵ Mentioned as one of the sources of the *Rasayogāsāgara*.

RASĀRṆAVA by Siddharājayogin.⁸³⁶

RASĀRṆAVAKALĀ.⁸³⁷

RASASĀGARA.⁸³⁸ This is an exhaustive treatise in several chapters (khaṇḍa). The two chapters that have been preserved deal with metallic and mineral preparations (rasakhāṇḍa) and vegetable decoctions (kvāthakhāṇḍa).⁸³⁹

A *Rasasāgara* is quoted in Dattarāma's *Bṛhadrasarājasundara*,⁸⁴⁰ Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmāṇavijñāna*, Nīścala-kara's *Ratnaprabhā*, the *Bhāratabhaiṣajyaratnākara*,⁸⁴¹ *Rasarājalaśmī*, *Rasayogasāgara*,⁸⁴² and Ṭoḍara's *Āyurvedasaukhya*.⁸⁴³ A *Rasasāgara* in Hindī was one of the sources of the *Pāradasaṃhitā*.

RASASĀGARA by Kṣemāditya, son of Ghanāditya.⁸⁴⁴ Used as a source in the *Rasayogasāgara*.

RASASAMGRAHA.⁸⁴⁵ A *Rasasaṃgraha* is referred to in the *Amṛtasāgara*.

RASASAMGRAHASIDDHĀNTA, anonymous.⁸⁴⁶

RASASAMGRAHASIDDHĀNTA by Acyuta, son of Dharāṇi Goṇiga, son of Mahādeva, son of Soma, son of Hari, of the family of minister Nāḍiga, a Nāgara.⁸⁴⁷ Acyuta is sometimes regarded as the teacher of Somadeva, the author of the *Rasendracintāmaṇi*.⁸⁴⁸

RASASAMGRAHASIDDHĀNTA by Govindarāma Ṭhākura,⁸⁴⁹ son of Veṇḍatta and a resident of Naḍiyāda and Kāśī.⁸⁵⁰ This elaborate treatise in eleven chapters was composed in A.D. 1793/94.⁸⁵¹ It is based on *Rasacintāmaṇi*, *Rasaḥṛdaya*, *Rasalaśmīvilāsa*, *Rasamañjarī*, *Rasārṇava*, etc.⁸⁵² The *Rasayogasāgara* mentions this work as one of its sources.⁸⁵³ It is quoted in the *Kūpīpakvarasanirmāṇavijñāna*.

RASASAMJIVANEŚVARA by Harihara.⁸⁵⁴ A *Rasasaṃjīvana* is mentioned among the sources of the *Ratnākaraṣadhayogagrantha*.

RASAŚAMKARA by Śaṃkara.⁸⁵⁵ The *Rasaśaṃkara* was one of the sources of Dattarāma's *Bṛhadrasarājasundara*.⁸⁵⁶ A Śaṃkara is also credited with the *Rasarāja* and a *Rasaratnasamuccaya*.

RASASAMSKĀRA.⁸⁵⁷

RASASĀRA by Kṣemāditya.⁸⁵⁸

RASASĀRĀMṚTA by Rāmasena. This work is about pharmaceutical preparations of mercury and other metallic substances; it ends with a chapter on aphrodisiacs (vṛṣyadhikāra).

Sources are the treatises of Gahanānandanātha, Nityanātha and Śālinātha.⁸⁵⁹

An author called Rāmasena is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

RASASĀRASAMGRAHA, anonymous.⁸⁶⁰ A *Rasasārasamgraha* is one of the sources of the *Rasayogasāgara*⁸⁶¹ and may be quoted in the *Yogarātnākara*.

RASASĀRASAMGRAHA by Gaṅgādharaṇḍita.⁸⁶² This short treatise describes mercurial preparations and their medicinal uses.⁸⁶³

RASASĀRASAMGRAHA by Kālidāsa.⁸⁶⁴

RASASĀRASAMUCCAYA.⁸⁶⁵ This work is similar to the *Rasaratnasamuccaya*; it is followed by explanatory notes in Telugu.⁸⁶⁶

RASASĀRATILAKA by Rasendratilaka Yogin.⁸⁶⁷ Rasendratilaka is a Rasasiddha in the *Pāradasaṃhitā* and *Rasaratnasamuccaya*.

RASASĀRODDHĀRAPADDHATI.⁸⁶⁸ Quoted in the *Kūpīpakvarasanirmāṇavijñāna* and *Pāradasaṃhitā*.

RASASARVEŚVARA⁸⁶⁹ by Vāsudeva.⁸⁷⁰ Vāsudeva is one of the Rasasiddhas in the *Pāradasaṃhitā* and *Rasaratnasamuccaya*.⁸⁷¹

RASASARVEŚVARADARŚANA.⁸⁷²

RASAŚĀSTRA.⁸⁷³

RASAŚĀSTRASĀRASAMGRAHA, anonymous.⁸⁷⁴

RASAŚĀSTRASĀRASAMGRAHA by Dattātreyavaidya.⁸⁷⁵

RASASIDDHĀNTA.⁸⁷⁶ A *Rasasiddhānta* is quoted in Ṭoḍara's *Āyurvedasaukhya*.⁸⁷⁷

RASASIDDHĀNTASĀGARA.⁸⁷⁸

RASASIDDHĀNTASAMGRAHA.⁸⁷⁹

RASASIDDHĀNTAŚĀSANA.⁸⁸⁰

RASASIDDHI.⁸⁸¹

RASASIDDHIPRAKĀŚA, anonymous.⁸⁸²

RASASIDDHIPRAKĀŚA by Mādhavabhaṭṭa.⁸⁸³ The author may have been a relative of Mādhava Upādhyāya, who wrote the *Āyurvedaprakāśa*, for both were born in Saurāṣṭradeśa from a Sārasvata family. The first chapter of the work describes mercury, its origin, purification, etc.; the second chapter is about the uparasas.⁸⁸⁴ The *Rasasiddhiprakāśa* quotes the *Rasapaddhati* and is therefore probably later than the first half of the seventeenth century.⁸⁸⁵

RASASIDDHIPRAKĀŚA by Viṣṇugiriṇī of Kacha.⁸⁸⁶

RASASIDDHIŚĀSTRA. This treatise, ascribed to Vyāḍipāda (Bha-li-pa), and lost in the original Sanskrit, was translated into Tibetan under the title of *Dñul-chu grub-paḥi*

bstan-bcos. The Tibetan version, mentioned in the catalogue of the Tanjur, has not been preserved. The translators were Narendrabhadra of India and the Tibetan Rin-chen dpal (Ratnaśīrī) of Oḍḍiyāna.⁸⁸⁷

The treatise called *Rasāyanaśāstrodhṛti* may have formed part of the *Rasasiddhiśāstra*.⁸⁸⁸

RASASINDHU, anonymous.⁸⁸⁹ A *Rasasindhu* is one of the sources of the *Pāradasaṃhitā*; it is quoted in the *Bṛhadrasarājasaundara* and Somadevaśarman's commentary on the *Āyurvedaprakāśa*.

RASASINDHU by Viṣṇu.⁸⁹⁰

RASASINDHU by Viṭṭhala,⁸⁹¹ son of Mahādevagalagaṇḍa.⁸⁹² Chapter one is called *rasaśodhana-jāraṇādhikāra*, chapter three *rasagrahaṇajalayogādhikāra*; the title of another chapter is *dūtādilakṣaṇādhikāra*.⁸⁹³

The introductory verses indicate that this work also deals with therapy.⁸⁹⁴

Authorities and works quoted are:⁸⁹⁵ *Bhavānīmata*, *Kākacaṇḍeśvaramata*, *Nilakaṇṭha*, *Rasacandrikā*, *Rasadarpaṇa*, *Rasadīpikā*, *Rasāmṛta*, *Rasamuktāvalī*, *Rasarahasya*, *Rasarājajalakṣmī*, *Rasaratnākara*,⁸⁹⁶ *Rasaratnāvalī*, *Rasārṇava*, *Rasendramaṅgala*, *Śrīmadauma*,⁸⁹⁷ *Sūtamahodadhī*, *Svacchandaśaktyāgama*, and *Svasaṃvedya*.⁸⁹⁸ To this series should be added:⁸⁹⁹ *Anandānubhava*, *Dāmodara*, *Kāmadevabhavānīmata*,⁹⁰⁰ *Kāmarājaraśadīpikā*,⁹⁰¹ *Kulāgama*,⁹⁰² *Lokaṇātha*, *Nakṣatramālā*, *Rasamahodadhī*, *Rasapaṭala*, *Rasārṇava* of Pareśa, *Rasendracūḍāmaṇi*, *Ratnāvalī*, *Siddhanāgārjuna*, *Śrīmata*, *Sūtārṇava*, *Vaidyanātha*, *Vāsudevānubhava*, *Vyāḍi*, and *Yāmalatraya* of Keśava.⁹⁰³

The *Rasasindhu* is quoted in the *Rasendrapurāṇa*, *Ṭoḍara's Āyurvedasaukhya*, *Trimalla's Yogataraṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, and the *Yogaratnākara*.

The quotations from the *Rasarājajalakṣmī*, another work of Viṭṭhala, also called *Viṣṇudeva*, prove that the *Rasasindhu* was written after the completion of the former work.

RASASINDŪRA.⁹⁰⁴

RASASINDŪRĀDINIRMĀṆAVIDHI.⁹⁰⁵

RASASINDŪRAYOGAKRAMĀNUPĀNAVICĀRA.⁹⁰⁶

RASAŚODHANA.⁹⁰⁷

RASAŚODHANAVIDHI by Nityanātha.⁹⁰⁸

RASAŚUDDHI.⁹⁰⁹

RASAŚUDDHIVIDHĀNA.⁹¹⁰

RASASUDHĀKARA.⁹¹¹

RASASUDHĀMBHODHI.⁹¹² This work was one of the sources of *Viṣṇudeva's Rasarājajalakṣmī*.

RASASUDHĀNIDHI by Vrajārāja Śukla.⁹¹³

RASASŪTRĀBHIDHĀNA:⁹¹⁴ an anonymous text on the origin of mercury from the semen of Śiva.⁹¹⁵ *Rasasūtrābhidhāna* is the title of one of the chapters of Maṅgalagiri's *Sūtrasthāna*.⁹¹⁶

RASASŪTRASTHĀNA.⁹¹⁷

RASASVACCHANDA.⁹¹⁸ Svacchanda(bhairava) is often referred to and quoted in works on rasaśāstra.⁹¹⁹ Several Tantric works are called after Svacchanda(bhairava).⁹²⁰

RASATANTRA by Guha.⁹²¹ This work, said to consist of 6,000 verses, is mentioned in the *Goraḥṣaṇhitā*.⁹²²

RASATANTRA by Vīrabhadra.⁹²³ This work, in 1,000 verses, is referred to in the *Goraḥṣaṇhitā*.⁹²⁴

RASATANTRASAMGRAHA.⁹²⁵

RASATANTRASĀRA. This work, otherwise unknown, is one of the sources of the *Rasendrasambhava*.

RASATANTRĀVALĪ by Gurudatta Siddha.⁹²⁶

RASATARAṄGAMĀLIKĀ by Janārdanabhāṭṭa.⁹²⁷

RASATARAṄGIṆĪ by Bhānūdatta Miśra.⁹²⁸

RASATATTVASĀRA.⁹²⁹

RASATATTVAVIVECANA by Ambikādatta Śāstrī.⁹³⁰ This useful and systematic work, written in Hindī, with a profusion of quotations from Sanskrit texts, mentions the following sources: *Ānandakanda*, *Āyurvedaprakāśa*, *Bhāvaprakāśa*, *Bṛhadīyogatarāṅgiṇī*, *Dhanvantarisaṇhitā*, *Kāmaratna*, *Nighaṇṭuratnākara*, *Pāradasaṇhitā*, *Rasacintāmaṇi*, *Rasadarpaṇa*, *Rasaḥṛdaya* and its commentary, *Rasakāmadhenu*, *Rasamānasa*, *Rasamārtanda*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasarājapaddhati*, *Rasarāja-sundara*, (Nityānātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasāra*, *Rasatarāṅgiṇī*, *Rasendracintāmaṇi*, *Rasendracūdāmaṇi*, *Rasendramaṅgala*, *Rasendrasārasaṅgraha*, *Rasopaniṣad*, *Rudrayāmala*, *Śaktyavatāra*, *Śāringadharasaṇhitā*, *Ṭoḍarānanda*, *Vaidyakaipadruma*, *Yogaratnākara*, and *Yogatarāṅgiṇī*.

RASAUṢADHACIKITSĀ.⁹³¹

RASAUṢADHALEHYAVIDHĀNA.⁹³²

RASAUṢADHAVIDHĀNA.⁹³³

RASAUṢADHIVARGAPRAKARAṆA.⁹³⁴

RASAVĀDA.⁹³⁵

RASAVĀGBHAṬA.⁹³⁶ This work is one of the sources of the *Pāradasaṇhitā*; it is quoted in the *Rasakāmadhenu*.

RASAVAIDYA.⁹³⁷

RASAVAIDYAKA.⁹³⁸

RASAVAIŚEṢIKA, anonymous.⁹³⁹

RASAVAIŚEṢIKA by Vellālagopāla.⁹⁴⁰

RASAVALLARĪ.⁹⁴¹

RASĀVALOKA by Śukrācārya.⁹⁴² This work, in 6,000 verses, is mentioned in the *Goraṅgasaṃhitā*⁹⁴³ and Māṇikyadeva's *Rasaratnasamuccaya*. Śukra or Śukrācārya is a Rasasiddha in the *Rasajalanidhi*.⁹⁴⁴ A particular method of killing iron (lohamāraṇa), resulting in a product called śukralauha, was taught by Śukra to his disciple Ādima.⁹⁴⁵

RASAVĀRIDHI by Māṇḍavya.⁹⁴⁶

RASAVARṆA.⁹⁴⁷

RASAVARṆANA.⁹⁴⁸

RASĀVATĀRA.⁹⁴⁹ Quoted in one of the pariśiṣṭas of the *Ānandakanda*,⁹⁵⁰ Caturbhujā's commentary on the *Rasaḥṛdaya*, Khare's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmāṇavijñāna*, and Toḍara's *Āyurvedasaukhyā*. Mentioned as one of the sources of the *Pāradasaṃhitā* and *Rasayogasāgara*.⁹⁵¹

RASĀVATĀRA by Māṇikyacandra Jaina.⁹⁵² Recorded among the sources of the *Rasayogasāgara*.⁹⁵³ Quoted in the *Kūpīpakvarasanirmāṇavijñāna*. The work is placed in the fourteenth or fifteenth century.⁹⁵⁴

RASAVIDHĀNA.⁹⁵⁵

RASAVIDYĀ.⁹⁵⁶

RASAVIDYĀDĪKṢĀVIDHĀNA.⁹⁵⁷

RASAVIDYĀMAHĀRṆAVA, compiled by Raghunātha Śāstrin.⁹⁵⁸ Sources of this work are: *Pāradasaṃhitā*, *Rasajalanidhi*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasārājama-hodadhi*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasāyanatarāṅgiṇī*, *Rasendracintāma-ṇi*, and *Rasendrasārasaṃgraha*.

RASAVIDYĀRATNA by Śivānanda Yogin.⁹⁵⁹

RASAVIDYĀSĀRODDHĀRA.⁹⁶⁰

RASAVINODA.⁹⁶¹

RASAVIŚVADARPAṆA by Harihara.⁹⁶²

RASAVIVEKA.⁹⁶³

RASĀYĀMALA.⁹⁶⁴ A *Rasayamala* is quoted in Vaidyacinatāmaṇi's *Prayogāmṛta*.

RASĀYANA.⁹⁶⁵

RASĀYANAKALPADRUMA by Rāmākṛṣṇa Bhaṭṭa.⁹⁶⁶

RASĀYANAKĀVYA by Nāthurāma.⁹⁶⁷

RASĀYANANIDHĀNA.⁹⁶⁸

RASĀYANANIRMĀṆAVIDHI.⁹⁶⁹

RASĀYANANIRŪPAṆA.⁹⁷⁰

RASĀYANĀNUPĀNA.⁹⁷¹

RASĀYANAPARĪKṢĀ.⁹⁷² Recorded among the sources of the *Rasayogasāgara*.

RASĀYANAPRAKARAṆA by Merutuṅga.⁹⁷³

RASĀYANAPRAKĀŚA.⁹⁷⁴

RASĀYANAPRAKRIYĀSAMGRAHA.⁹⁷⁵

RASĀYANARASEŚVARĀRĀDHANAVIDHI.⁹⁷⁶

RASĀYANASAMGRAHA.⁹⁷⁷ Sources quoted are: *Cikitsāsāgara*, *Laghuyogatarāṅgiṇī*, *Motiyogatarāṅgiṇī*, *Rasakaumudī*, *Rasamañjarī*, *Rasaratnaḍīpa*, *Rasaratnākara*, *Rasa-saṃketakalikā*, *Rasasāra*, *Rasāyanādhyāya*, *Rasendracintāmaṇi*, *Śārṅgadharma*, *Vaidya-manotsava*, *Vaidyarahasya*, and *Vaidyavilāsa*.⁹⁷⁸

The *Rasāyanasamgraha* is quoted in the *Āyurvedīya Khanijavijñāna*.

RASĀYANASAMGRAHA, compiled by Kṛṣṇaśāstrī Bhāṭavaḍekar.⁹⁷⁹ Mentioned as one of the sources of the *Rasayogasāgara*.⁹⁸⁰ Quoted in the *Kūpīpakvarasanirmāṇavijñāna*.

RASĀYANASAMHITĀ by Svāmin Prabodhānanda.⁹⁸¹

RASĀYANAŚĀSTRA.⁹⁸²

RASĀYANAŚĀSTRODDHṚTI: a treatise lost in its Sanskrit original, rendered into Tibetan under the title of *Gser-hgyur-gyi bstan-bcos (bsdus-pa)*, or, in Sanskrit, *Dhātuvā-daśāstra (saṃgraha)*.⁹⁸³

The subjects dealt with in the treatise, consisting of forty-four verses, are: the qualities (yon-tan) of mercury (dñul-chu) and mica (lhañ-cher) (4–5); the preparation of a copper polish (6–7); the amalgamation of mercury with silver and gold (8); the bandha of mercury (9); the preparation of gold-coloured polishes by means of the three rarest substances or their substitutes (10–12); aurifaction (13–16); varieties of copper (17); gold- or silver-coloured polishes on copper and lead (18–19); other polishes (20–21); the qualities of gold (22–23); a polish (24); the preparation of powdered gold (25–26); the purification of copper and steel (ñod-ldan-lcags) (27–29); the purification of brass (30), bronze (31), lead (32–35) and zinc (36–37); purification in general (38–39); the impurities of gold (40–41); the powers of the Siddhas (42); the preparation of a polish on iron (43–44).

An authority referred to is Candrapakṣa (6: Zla-baḥi phyogs).

The name of the translator is Ratnaśrī, also called O-rgyan-pa.⁹⁸⁴

The *Rasāyanaśāstroddhṛti* may have formed part of Vyāḍipāda's *Rasasiddhiśāstra*.⁹⁸⁵

RASĀYANATARĀṅGIṆĪ.⁹⁸⁶ This treatise, similar to the *Rasaratnākara*, is divided into chapters called tarāṅga; it describes the origin and purification of mercury, alchemical processes regarding gold and the other dhātus, etc.; poisons, aphrodisiacs, oils and ghees are also dealt with.⁹⁸⁷

The *Rasāyanatarāṅgiṇī* was one of the sources of the *Rasavidyāmahārṇava*.

RASĀYANAVIDHĀNA.⁹⁸⁸

RASĀYANAVIDHI.⁹⁸⁹

RASĀYANAVIDHI by Nīlakaṇṭha.⁹⁹⁰

RASĀYANAVIVARAṆA.⁹⁹¹

RASAYOGAMUKTĀVALĪ, anonymous.⁹⁹²

RASAYOGAMUKTĀVALĪ by Narahari Bhaṭṭa.⁹⁹³

RASENDRA.⁹⁹⁴ A *Rasendra* is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

RASENDRABHAIRAVA by Bhairava.⁹⁹⁵

RASENDRABHĀṆḌĀGĀRA by Rasendranātha.⁹⁹⁶

RASENDRABHĀSKARA by Siddha Bhāskara.⁹⁹⁷ Bhāskara is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasajalanidhi*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Rasendra-sambhava*.

RASENDRABHĀSKARA by Lakṣmīnārāyaṇa Śarman.⁹⁹⁸

RASENDRACINTĀMAṆI by Anantadevasūri.⁹⁹⁹

RASENDRACINTĀMAṆI by Bhagadeva Sūri.¹⁰⁰⁰

RASENDRACŪḌĀMAṆI, anonymous.¹⁰⁰¹

RASENDRACŪḌĀMAṆI by Nakiṇḍideva.¹⁰⁰²

RASENDRAKALPADRUMA by Rāmakṛṣṇabhaṭṭa, son of Nīlakaṇṭhabhaṭṭa.¹⁰⁰³ This work is variously described: it consists of two sections (kāṇḍa), divided into several chapters (adhyaṃya); the first section (rasakāṇḍa) is about alchemical processes, and the second (prayogakāṇḍa) about the employment of inorganic compounds in various diseases.¹⁰⁰⁴ Another description runs as follows: it consists of two sections, called saṃskāra- and prayogakāṇḍa; the saṃskārakāṇḍa is arranged in six chapters, dealing with (1) rasaśuddhi, (2) mūrchā, (3) bandhana, (4) māraṇa, (5) abhrādisaṃskāra, (6) svarīḍisaṃskāra, prastāra, and yantras.¹⁰⁰⁵ A third author describes it as an exhaustive treatise in four sections, called respectively śuddhi-, mūrchā-, māraṇa-, and bandhakāṇḍa; it is said to give a detailed description of furnaces, retorts, etc.¹⁰⁰⁶

The *Rasendrakalpadruma* is a compilation, containing numerous quotations from *Rasamaṅgala*, *Rasāmṛta*, (*Rasa*)*ratnākara*, *Rasaratnasamuccaya*, and *Rasārṇava*.¹⁰⁰⁷ Much of its material agrees closely with the *Rasendracintāmaṇi*.¹⁰⁰⁸

Rāmakṛṣṇabhaṭṭa wrote an auto-commentary, called *Vaidyaratnākara*, on his *Rasendrakalpadruma*.¹⁰⁰⁹

The work is quoted in the *Bṛhadrasarājasundara*, *Kūpīpakvarasanirmāṇavijñāna*, *Pāradasaṃhitā*, Vaidyarāja's *Sukhabodha*,¹⁰¹⁰ and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*; it is one of the sources of the *Rasayogasāgara*.

The author may have been the father of Rāmakavi, who wrote the *Śṛṅgā-rarasodaya*.¹⁰¹¹ One of Rāmakṛṣṇabhaṭṭa's pupils was Narasiṃha Kavirāja, the author of a number of medical treatises.¹⁰¹²

The *Rasendrakalpadruma* is assigned to the fourteenth,¹⁰¹³ fifteenth,¹⁰¹⁴ or sixteenth century,¹⁰¹⁵ but actually belongs to the middle or second half of the seventeenth century, because the author's father, Nīlakaṇṭha, lived in the period A.D. 1610–1645.¹⁰¹⁶ This chronological position is confirmed by the date of his pupil Narasiṃha Kavirāja, who flourished in the first half of the eighteenth century.

RASENDRAPAṬALA.¹⁰¹⁷

RASENDRARATNAKOṢA by Deveśvara Upādhyāya.¹⁰¹⁸ Recorded among the sources of the *Rasayogasāgara*.¹⁰¹⁹

RASENDRASAMHITĀ.¹⁰²⁰ Quoted in the *Bṛhadrasarājasundara*,¹⁰²¹ *Rasakāmadhe-nu*,¹⁰²² and Trimalla's *Yogatarāṅgiṇī*. Recorded among the sources of the *Rasayogasāgara*.¹⁰²³

RASENDRASAMPRADĀYA by Paṇḍit Hazārīlāl Sukul.¹⁰²⁴

RASENDRASAMUTPATI.¹⁰²⁵

RASENDRASĀRASAMGRAHA, anonymous.¹⁰²⁶

RASENDRASĀRASAMGRAHA by Kṛṣṇacandravaidya.¹⁰²⁷

RASENDRASURAPRABHĀVA by Sūrasena.¹⁰²⁸ Śūrasenaka is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasaratnākara*, and *Rasaratnasamuccaya*.¹⁰²⁹

RASENDRATILAKA by Kāyastha Cāmuṇḍa.¹⁰³⁰

RASENDRAVĀIDYA.¹⁰³¹

RASENDRAVIJÑĀNA by Kavirāja Śrīrāmādarśa Siṃha.¹⁰³² The seven chapters of this recent work deal with: (1) rasa, its śodhana and māraṇa, and the preparation of sindūra; (2) uparasas; (3) dhātus; (4) lohas; (5) ratnas and uparatnas; (6) rasāyana; (7) kṣārāmla and lavaṇa.

RASENDRAYOGA.¹⁰³³

RASENDRODAYA.¹⁰³⁴

RASENDUŚEKHARA.¹⁰³⁵

RASENDUTILAKA.¹⁰³⁶

RASEŚVARANIDHI.¹⁰³⁷

RASEŚVARASIDDHĀNTA.¹⁰³⁸ One of the quotations from this work, found in the *Sarvadarśanasamgraha* (9.7–9), mentions as Siddhas who attained jīvanmukti: Carvaṭi, Govindabhagavatpāda, Govindanāyaka,¹⁰³⁹ Kandalāyana, Kāpāli, Kapila, king So-meśvara, and Vyāli.

G. Hāldār asserts that this treatise was written by Somadeva, the author of the *Rasendracūḍamaṇi*, in collaboration with his teacher, Acyuta, the son of Goṇikā.¹⁰⁴⁰

RASODAYA by Vināyaka.¹⁰⁴¹ This work, in 8,000 verses, is mentioned in the *Goraṅṣa-saṃhitā*.¹⁰⁴²

RASODDHĀRATANTRA. This work, also called *Rasasaṃhitā*, is a iatrochemical treatise in Sanskrit verse and prose, composed by Caranātīrtha Mahārāja (i.e., Jivram Kālīdās).¹⁰⁴³ The Gujarātī version of its Cikitsākhanda, also called *Upacārapaddhati*, was very well received. A Hindī version has also been published.¹⁰⁴⁴

The Hindī version deals with the aetiology, symptomatology and treatment, mainly by means of rasayogas, of the diseases. Sanskrit verses from the *Rasoddhāratra* and some other treatises¹⁰⁴⁵ are interspersed among the Hindī prose.

The work is said to be based on the following sources: *Aṣṭāṅghṛdaya*, *Āyurveda-prakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bṛhannighaṇṭuratanākara*, *Cakradatta*, *Carakasamhitā*, *Gadanigraha*, *Rasakāmadhenu*, *Rasaprakāśasudhākara*, *Rasarājasundara*, (Nityanātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrasārasaṃgraha*, *Śārngadharasaṃhitā*, *Suśrutasaṃhitā*, *Vaidyājīvana*, *Vaiṅgasena*, *Vṛndamādhava*, *Yogaratnākara*, and *Yogatarāṅgiṇī*.

Additional sources referred to are the *Bṛhadyogatarāṅgiṇī* and *Yogaśataka*.

The Sanskrit text of the bhasmapīṣṭiprakaraṇa of the *Rasoddhāratra*, accompanied by some comments, is reproduced towards the end of the work. It deals with the preparation and medicinal uses of the bhasman (ashes) and pīṣṭi of the following substances: akīka (agate; 1–4),¹⁰⁴⁶ abhṛaka (mica; 5–18), abhṛakasattva (19–28), kāntapāṣāṇa (29–32), kāntaloḥa (33–47), kāsīsa (48–51), kāsīsa and godantī¹⁰⁴⁷ (52–54), kukkuṭāṇḍatvac (eggshells; 55–56), kāmśya (57–62), kharpara (63–66), godantī (67–69),¹⁰⁴⁸ gomeda (70–73), caturvaṅga (74–79),¹⁰⁴⁹ jaharamoharā (80–85),¹⁰⁵⁰ tāmra (copper; 86–97), tuttha (98–100), trivaṅga (101–105),¹⁰⁵¹ tṛṇkāntamaṇi (106–109),¹⁰⁵² nāga (lead; 110–115), indranīla (sapphire; 116–129), marakata (emerald; 130–142), pītāla (143–148), puṣparāga (topaz; 149–157), pañcaloḥa or vartaloḥa (158–167), pravāla (coral; 168–175), vaṅga (tin; 176–181), mayūrapicchā (peacock's feathers; 182–185), gaurīpāṣāṇa (186–192), māṇikya (ruby; 193–199), mākṣikasattva (200–204), muktā (pearls; 205–221), maṇḍūra (222–226), mṛgaśiṅga (deerhorn; 227–234ab), yaśada (zinc; 234cd–240), rajata (silver; 241–250), loha (iron; 251–255), lohābhra (256–259ab),¹⁰⁵³ varāṭikā (259cd–265), vajra (diamond; 266–272), vaikrānta (273–276),¹⁰⁵⁴ vaiḍūrya (277–286), śukti (287–288), śaṅkha (289–294), saptaratna and navaratna (296–310), suvarṇa (gold; 311–315), svarṇamākṣika (316–323), saṅgeyaśaba (jade; 324–327), sphāṭika (328–332),¹⁰⁵⁵ haritāla (333–344), and hīṅgula (345–349).

Sources quoted or referred to in this section are: *Āyurvedaprakāśa*, *Bṛhadyogatarāṅgiṇī*, Govindapādālī (the author of the *Rasahṛdaya*), *Rasaprakāśasudhākara*, (Nityanātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Yogaratnākara*.

The author repeatedly points to his own experiences in the bhasmapīṣṭiprakaraṇa.

Unusual names of disorders mentioned in the Hindī text are: aṃśughāta (p.402), durjalajanyaroga (p.266–267), jalodara of the head (p.215), mūḍhamāra (p.262–263), and mūtrapiṇḍa (p.301–302).

Uncommon diseases mentioned in formulae from the *Rasoddhāratra* in the *Bhe-*

śajasamhitā are: *gajāgraha* (1, nr. 49), *hṛddāha* (7, nr. 78), *kaṣṭhārtava* (6, nrs. 19, 23, 76), *phupphusagada* (6, nr. 105), *phupphusottharoga* (1, nr. 84), *mūtrapiṇḍa* (6, nr. 35), *smaronmāda* (6, nr. 85), and *snāyubhramśa* (6, nr. 16). One formula (6, nr. 49: *candre-śvarīṅṇikā*) is said to derive from *Gorakṣanātha*.

RASOPANIṢAD by Umā.¹⁰⁵⁶ This work, said to consist of 6,000 verses, is mentioned in the *Gorakṣasamhitā*.

RASOPARASANIGHAṆṬU.¹⁰⁵⁷

RASOPARASAŚODHANA.¹⁰⁵⁸ This work gives an account of the purification of mercury and other rasas and uparasas for converting them into medicines.¹⁰⁵⁹

RASOTPATTI.¹⁰⁶⁰

RASOTPATTIVIDHI.¹⁰⁶¹

RATNADHĀTUVIJÑĀNA by Badrīnārāyaṇa Purohita.¹⁰⁶²

RATNĀDIPARĪKṢĀ.¹⁰⁶³

RATNADĪPA by Kāśīrāma.¹⁰⁶⁴

RATNADĪPIKĀ.¹⁰⁶⁵ A work of this title is quoted in Ṭoḍara's *Āyurvedasaukhya*.

RATNADĪPIKĀ by Bhaḍeśvara.¹⁰⁶⁶

RATNADĪPIKĀ by Caṇḍeśvara.¹⁰⁶⁷ This treatise, in about 200 verses,¹⁰⁶⁸ arranged in ten chapters (*ijyotis*), describes precious and semi-precious stones.

The subjects of the chapters are: (1; 61 verses) *maṅgala* (1.1), introduction (1.2–3), the five major (*mahāratna*)¹⁰⁶⁹ and minor (*uparatna*) gems¹⁰⁷⁰ and their colours (1.5–8); the diamond (*vajra*; 1.9–61);¹⁰⁷¹ (2; 26 verses) the pearl (*mauktika*);¹⁰⁷² (3; 24 verses) the ruby (*māṇikya*);¹⁰⁷³ (4; 15 verses) the sapphire (*mīla*);¹⁰⁷⁴ (5; 35 verses) the emerald (*marakata*);¹⁰⁷⁵ (6; 6 verses) the zircon (*gomeda*);¹⁰⁷⁶ (7; 8 verses) the stones called *spatika* (rock crystal), *bhasmanāṅgaka*,¹⁰⁷⁷ *gāruḍodgāra*,¹⁰⁷⁸ *tārṅkṣya*,¹⁰⁷⁹ *garuḍamaṇi*,¹⁰⁸⁰ *āstikya*,¹⁰⁸¹ and *sauvarṇarekhāmaṇi*;¹⁰⁸² (8; 6 verses) the cat's eye (*vaiḍūrya*) and topaz (*puṣpaṛāga*);¹⁰⁸³ (9; 4 verses) coral (*pravāla*);¹⁰⁸⁴ (10; 10 verses) some properties of the stones described and their relationships with the nine *grahas*.¹⁰⁸⁵

The author discusses the places where each gem is found, its colours and other characteristics, types, good qualities and blemishes, uses, beneficial effects when worn, and the ascertainment of its value.

The five major gems are: diamond, pearl, ruby, sapphire and emerald; the minor gems are zircon, topaz, cat's eye and coral.

Four types, called after the four *varṇas* (*brāhmaṇa*, *kṣatriya*, *vaiśya*, *śūdra*) are distinguished of the diamond, ruby, sapphire, emerald and zircon.

A variety of the ruby is called *kuruvindaka*. Rock crystal (*spatika*) is said to be of three varieties.

Authorities mentioned are *Agastya*, *Nārada*, *Varāha*,¹⁰⁸⁶ and *Vyāsa* (1.4 and 10.10).

The *Ratnadīpikā* is quoted in Ṭoḍara's *Āyurvedasaukhya*.¹⁰⁸⁷

The author mentions his name in the introductory verses, but does not give any

information on his genealogy. V.W. Karambelkar, as well as Gairolā and T. Jhā, identify him as the author of a Smṛti digest called *Ratnākara*, divided into seven sections (kṛtya, dāna, vyavahāra, śuddhi, pūjā, vivāha, grhastha). The author of this work was the son of Vireśvara and belonged to the Ṭhakkura family. Caṇḍeśvara is also credited with a *Rājanīratnākara*.¹⁰⁸⁸ Other works attributed to him are¹⁰⁸⁹ the *Vivādaratnākara*,¹⁰⁹⁰ *Kṛtyacintāmaṇi*,¹⁰⁹¹ *Dānavākyāvalī*,¹⁰⁹² and *Śivavākyāvalī*.¹⁰⁹³

Caṇḍeśvara's literary activity belongs to the fourteenth century.¹⁰⁹⁴

RATNĀKARA.¹⁰⁹⁵

RATNAKUTŪHALA.¹⁰⁹⁶

RATNALAKṢANA.¹⁰⁹⁷

RATNAMĀLĀ by Paśupati.¹⁰⁹⁸

RATNAPARĪKṢĀ.¹⁰⁹⁹

RATNAPARĪKṢĀ by Buddhabhaṭṭa or Buddhabhaṭa, also called *Buddhabhaṭṭiyaratnaśāstra*,¹¹⁰⁰ This treatise,¹¹⁰¹ in about 225 verses, arranged in nine chapters, deals with: (1) the origin of gems (2–15); the diamond (vajra; 16–48); (2) the pearl (mauktika; 1–60); (3) the ruby (padmarāga; 1–31); (4) the emerald (marakata; 1–29); (5) the sapphire (indranīla; 1–20); (6) the cat's eye (vaiḍūrya; 1–16);¹¹⁰² (7) the chrysoberyl (karketana; 1–3); (8) the garnet (pulaka; 1–3);¹¹⁰³ (9) coral (vidruma; 1–4).

The author describes the mythical origin of each gem, the places where it is found, its characteristics, blemishes, curative and other properties, the ascertainment of the value, etc. Stones resembling the real ones, but much less in value, as well as counterfeit gems, are also discussed.¹¹⁰⁴

The four types of diamonds, called after the varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra), are known to the author; the other gems are not classified after this model.

Buddhabhaṭṭa is referred to as an authority on gems in Ṭhakkura Pherū's *Rayanaparikkhā*. Buddhabhaṭṭa's *Ratnaparīkṣā* is mentioned in Merutuṅga's *Prabandhacintāmaṇi*.¹¹⁰⁵ The *Ratnaparīkṣā* quoted in Somadeva's *Yasastilaka* is Buddhabhaṭṭa's work.¹¹⁰⁶

The *Garuḍapurāṇa* (chapters 68–80) incorporated the whole text of Buddhabhaṭṭa's work; the version forming part of the *Garuḍapurāṇa* has two extra chapters, on puṣpārāga (topaz; 74) and bhīṣmaratna (a kind of quartz; 76).

The author, Buddhabhaṭṭa(ṭa), who mentions his name in the introductory verses and at the end of his work, is by some regarded as a Buddhist,¹¹⁰⁷ although no traces of Buddhism are found in the text of edition b; on the contrary, all the allusions to mythology are inspired by Hindu traditions.

Clues to Buddhabhaṭṭa's chronological position are rare. Some assign him to the close of the fifth or the beginning of the sixth century,¹¹⁰⁸ others to the seventh or eighth,¹¹⁰⁹ or to the twelfth century.¹¹¹⁰ The reference to Buddhabhaṭṭa in Ṭhakkura Pherū's *Rayanaparikkhā* establishes that the former is earlier than the beginning of the fourteenth century.

The contents of Buddhabhaṭṭa's treatise are said to resemble those of the chapters on the same subject (80–83) of the *Bṛhatsaṃhitā*; L. Finot supposed them to be based

on a *Ratnaśāstra* anterior to the sixth century.¹¹¹¹

RATNAPARĪKṢĀ by Īśvaradīkṣita.¹¹¹² This work, in 105 verses, interspersed with some prose, quotes from and refers to the following sources: *Agastya* (2), *Āgastya* (92), *Āgastyaratnaśāstra* (11), *Āṅgīrasamata* (84), *Bhāradvājasṃṛti* (22), *Nighaṇṭu* (33), *Ratnasārasaṃgraha* (81), *Ratnaśāstra* (8; 68), *Utpalaparimala* (34),¹¹¹³ *Vāhaṭa* (41), and *Viśvakarmīya* (70; 91).

The arrangement of the contents is very unsystematic. Mythological tales about the origin of gems abound.

Some subjects dealt with are: gems to be discarded due to the presence of particular defects (20cd–22a), the seven defects of gems: *bindu*, *āvarta*, *tuṣa*, *trāsa*, *lekḥā*, *kalarika*, and *kīlaka* (22b–30ab),¹¹¹⁴ the four types of *sphaṭika*: *gomedaka*, *puṣparāga*, *vaidūrya*, and *śītaruṇmaṇi*¹¹¹⁵ (30c–f), the twenty-two types of *ratna* according to the *Utpalaparimala* (34–35), the five defects of gems: *kāṣa*, *trāsa*, *bindu*, *rekḥā*, and *jala-garbhatā* (59),¹¹¹⁶ and good qualities and defects associated with each of the five *mahā-bhūtas* (70–80).

RATNAPARĪKṢĀ by Rāmacandra.¹¹¹⁷

RATNAPARĪKṢĀ by Soma.¹¹¹⁸ This work, written in Prakrit, consists of 146 verses: 22 verses on *ratnaparīkṣā*, 48 on *mauktikaparīkṣā*, 17 on *maṇḍikaparīkṣā*, and 12 on *marakataparīkṣā*.

The same author's *Dhātu vādaparakaraṇa*, which is an appendix to the *Ratnaparīkṣā*, gives a detailed account of transmuting copper into gold.

Soma may have lived in the fourteenth century.¹¹¹⁹

RATNAPARĪKṢĀ by Tattvakumāra Muni.¹¹²⁰

RATNAPARĪKṢĀ by Vācaka Ratnaśekhara.¹¹²¹

RATNAPARĪKṢĀ by Varṇaśeṣvara.¹¹²²

RATNAPARĪKṢĀSAMUCCAYA.¹¹²³

RATNAPARĪKṢĀTĪKĀ.¹¹²⁴

RATNAPARĪKṢĀVIDHĀNA.¹¹²⁵

RATNAPRADĪPANIGHAṆṬU.¹¹²⁶

RATNAPRADĪPIKĀ by Bharadvāja.¹¹²⁷

RATNAPRAKARAṆA.¹¹²⁸

RATNASĀGARA.¹¹²⁹

RATNASAMGRAHA.¹¹³⁰ This work, in twenty-two verses, deals with: *vajra* (1–5), *mauktika* (6–7), *padmarāga* (8–9), *indranīla* (10–11), *marakata* (12–13), *vaidūrya* (14), *lasuna* (15), *puṣyarāga* (16), *gomedaka* (17), *sphaṭika* (18), *masāramaṇi* (19),¹¹³¹ and *perojā* (20).

RATNASAMUCCAYA, anonymous.¹¹³²

RATNASAMUCCAYA by Nāmadeva.¹¹³³

Other authorities mentioned are Sanaka, Śrīkāntamiśra, ¹¹⁹⁰ Viṣṇusvāmin and his *Sākārasiddhi*. ¹¹⁹¹

The *Raseśvaradarśana* is quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

The eighteen *saṃskāras* of mercury are according to the *Sarvadarśanasamgraha* (16–17): *svedana*, *mardana*, *murchana*, *sthāpana*, *pātana*, *nirodha*, *niyama*, *dīpana*, *gamana*, *grāsapramāṇa*, *jāraṇa*, *pidhāna*, *garbhadruti*, *bāhyadruti*, *kṣāraṇa*, *saṃrāga*, *sāraṇa*, *krāmaṇa* (together with *vedha*, and followed by *bhakṣaṇa*). ¹¹⁹²

Three hypotheses have been formulated concerning the authorship of the *Sarvadarśanasamgraha*, traditionally attributed to a Mādhava. This author was either the brother of Sāyaṇa, the famous commentator on the Vedas, or the son of Sāyaṇa, or the same as Cennu Bhaṭṭa. Sāyaṇa's brother Mādhava, also known as Vidyārāya, was a minister of the Vijayanagar kings Bukka I (A.D. 1356 or 1357 to 1377) ¹¹⁹³ and Harihara II (A.D. 1377–1404), ¹¹⁹⁴ but became a *saṃnyāsin* in 1391 and held the office of abbot of the Śringeri monastery. ¹¹⁹⁵

SARVEŚVARARASĀYANAROGA HARAPARIPUṢṬAKA, ¹¹⁹⁶ lost in its Sanskrit original, is a short treatise, preserved in a Tibetan translation. The Tibetan title is: *Thams-cad-kyi dba'i-phyug bcud-len nad thams-cad hjomis śi'i lus-kyi stobs rgyas-par byed-pa*. ¹¹⁹⁷

The author is Dba'i-phyug (= Sanskrit Īśvara). ¹¹⁹⁸ The translators were Śivādāsa of Haridvāra and Rin-chen dpal (Ratnaśrī) of Odḍiyāna.

The subjects dealt with are: the purification of mercury (1–3), copper (4–5) and tin (6); the killing of iron (7) and mica (8); a prescription against skin diseases (10); the purification of silver (11); the killing of lead (12); the purification of gold (13); the killing of a substance called *supakita* (14); ¹¹⁹⁹ the preparation of some *rasāyana* pills (15–16). ¹²⁰⁰

ŚATAJĀRANA SINDŪRA. ¹²⁰¹

SIDDHALAKṢMĪŚVARATANTRA. ¹²⁰² Quoted in the *Āyurvedaprakāśa*, *Pāradasaṃhitā*, the *Rasendracintāmaṇi*, and Trimalla's *Bṛhadhyogatarāṅgiṇī*.

SIDDHARATNĀKARA. ¹²⁰³

SIDDHASĀRATANTRA by Nisācarabhaṭṭācārya. ¹²⁰⁴ This work deals with the following subjects: *mahāgūḍhasiddhi*, *guruprāpti*, *śiṣyalakṣaṇa*, *maṇḍapavidhāna*, *balividhāna*, *mṛdvikalpa*, *mūṣāvīracana*, *upaskaraṇavidhi*, *vahnikarmavidhi*, *mahārasoparasa-kathana*, *dravyaśodhana*, *loharaṇjana*, *lohamāraṇa*, *sattvapātana*, *dvandvamelana*, *gaganadrāvaṇa*, ¹²⁰⁵ *hematārākṣṭipradarśana*, *svedanādhikāra*, *bījavyutpatti*, *viḍādhikāra*, *khagayuktyadhikāra*, *sārādhikāra*, *krāmaṇakaraṇa*, *varṇotkarśādhikāra*, *mṛdūkaraṇādhikāra*, and *rasasiddhiprayoga*. The author refers to Nāgārjuna. ¹²⁰⁶

SIDDHATANTRA. ¹²⁰⁷

SINDŪRAPRAKARAṆA by Somaprabhasūri. ¹²⁰⁸

ŚUDDHIPRAKARAṆA.¹²⁰⁹
 ŚŪLAKASIMHAVIDHĀNA.¹²¹⁰

SŪTAMAHODADHI.¹²¹¹ Quoted in Rāmarāja's *Rasaratnapradīpa*, the *Rasarājalakṣmī*, Ṭoḍara's *Āyurvedasaukhya*, and Viṭṭala's *Rasasindhu*. This work proves to be earlier than the third quarter of the fourteenth century, in which the *Rasarājalakṣmī* was composed.

SŪTAPRADĪPIKĀ.¹²¹² This work mentions thirteen major poisonous substances and six minor ones (upaviṣa).¹²¹³ The *Sūtapradīpikā* is mentioned among the sources of the *Rasayogasāgara*.¹²¹⁴

SŪTARĀJA.¹²¹⁵ One of the sources of the *Ratnākaraśayogagrantha*. A *Sūtarāja* is mentioned in Revanāsiddha's *Vīrabhaṭṭiya*.

SŪTARĀJARASA.¹²¹⁶

SŪTĀRṆAVA.¹²¹⁷ Quoted in the *Rasasindhu* and Ṭoḍara's *Āyurvedasaukhya*. The reference to the *Sūtārṇava* in the *Rasasindhu* indicates that the former is earlier than the third quarter of the fourteenth century.

SUVAṆABHASMAVIDHĀNA.¹²¹⁸
 SUVAṆANIRMĀṆAVIDHI.¹²¹⁹

SUVAṆNARAUPYASIDDHIŚĀSTRA by Jinadattasūri, a Jain monk belonging to the Kharataragaccha.¹²²⁰

SUVAṆASĀRA.¹²²¹

SUVAṆATANTRA or *Svarṇatantra*.¹²²² This text was revealed by Śiva to Paraśurāma, who, rendered destitute after donating all his worldly possessions to Kaśyapa, acquired from Śiva the means of transforming mercury into gold.¹²²³ The introductory verses mention that, earlier already, Śiva transmitted to Paraśurāma the *Ratnatānta*, the knowledge about 2,000 guṭikās, 600 forms of mercury, eight dhātukalpas, and the dhātuyogākhyakalpa.¹²²⁴ The *Suvarṇatantra* contains the kākarī-, aṅgāra- and śvetabṛhaṭīkalpas,¹²²⁵ and describes five varieties of (śaṅkha)drāva and their uses.¹²²⁶ A plant that is regarded as an essential ingredient of a mercurial preparation is called tailakanda.¹²²⁷

The *Suvarṇatantra* is regarded as posterior to the sixteenth century.¹²²⁸

SVACCHANDABHAIRAVA by Balabhadra.¹²²⁹ Some rasayogas are called after Svachchandabhairava.¹²³⁰ He is a Rasasiddha in the *Pāradasaṃhitā*, *Rasaratnasamuccaya*, *Rasataraṅgiṇī*, and *Rasendrasambhava*.

SUVAṆADĪPIKĀ.¹²³¹ This small treatise describes the transmutation of base metals into gold or silver.¹²³²

- SVARṆAKĀRAMĀRAṆA. ¹²³³
 SVARṆAMUKTĀRASAVYĀKHYĀ. ¹²³⁴
 SVARṆAPAÑCĀMṚTARASAYOGA. ¹²³⁵
 ŚVETĀŚVARASABADDHAKALKAVIDHĀNA by Somanātha. ¹²³⁶
 TĀLAKAMĀRAṆA. ¹²³⁷
 TĀLAKEŚVARARASA. ¹²³⁸
 TĀMRABHASMASINDŪRAVIDHI. ¹²³⁹
 TĀMRABHASMAVIDHI. ¹²⁴⁰
 TĀMRAKALPA. ¹²⁴¹
 TĀMRAŚUDDHIVIDHĀNA. ¹²⁴²
 TĀMRĀVANA by Muṇḍin. ¹²⁴³
 TANTRARĀJA by Jābāla. ¹²⁴⁴
 TANTRASĀRAKOṢA by Śarikunāthadatta. ¹²⁴⁵
 TĀRAKRIYĀ. ¹²⁴⁶
 TRAILOKYACINTĀMAṆI. ¹²⁴⁷
 TRAILOKYACINTĀMAṆIGUṬIKĀNIRMĀṆAVIDHI. ¹²⁴⁸
 TRAILOKYACINTĀMAṆIRASANIRŪPAṆA. ¹²⁴⁹
 TRAILOKYACINTĀMAṆIRASAYOGA. ¹²⁵⁰
 TUTTHABHASMAVIDHI. ¹²⁵¹
 UDAYABHĀSĀKARARASA. ¹²⁵²
 UPADHĀTUMĀRAṆA. ¹²⁵³
 UPARASAPRAKARAṆA. ¹²⁵⁴

UTTAÑKADARPAṆA. ¹²⁵⁵ The larger part of this text has been borrowed from Trimal-
 la's *Yogatarāṅgīnī*. ¹²⁵⁶

- VAIDYA. ¹²⁵⁷
 VAIDYAGRANTHA. ¹²⁵⁸
 VAIDYAKARASARĀJAMAHODAYA, compiled by Nārāyaṇaprasāda Miśra. ¹²⁵⁹

VAIDYAKASAMGRAHA. ¹²⁶⁰ An anonymous work, dealing with rasas only. It quotes
 the *Rasaratnākara*, (*Śārṅgadhara*)*saṃhitā* and *Yogaratnasamuccaya*. ¹²⁶¹

- VAIDYĀMṚTA by Nārāyaṇa. ¹²⁶²
 VAIDYARASĀYANA. ¹²⁶³
 VAIDYAVIṢAYA. ¹²⁶⁴
 VAJRAKṢĀRAVIDHĀNA. ¹²⁶⁵
 VAṆGABHASMANIRMĀṆACIKITSĀKRAMA. ¹²⁶⁶
 VAṆGABHASMAVIDHĀNA. ¹²⁶⁷
 VAṆGAMĀRAṆA. ¹²⁶⁸

VARṆARATNĀKARA by Jyotirīśvara Ṭhakkura. This work describes eighteen ratnas
 and thirty-two uparatnas. ¹²⁶⁹

VASANTACANDRODAYA.¹²⁷⁰
 VASANTAKUSUMĀKARĀDIYOGĀH.¹²⁷¹
 VASANTAKUSUMĀKARAYOGA.¹²⁷²
 VĀSUDEVASAMHITĀ by Vāsudeva.¹²⁷³
 VICITRARASAPRAYOGANIRŪPAṆA.¹²⁷⁴
 VIVIDHARASANIRMĀNACIKITSĀ.¹²⁷⁵
 VRAṆĀṆKUŚARASA.¹²⁷⁶
 YANTRACŪḌĀMAṆI.¹²⁷⁷
 YANTRODDHĀRA.¹²⁷⁸
 YAVANAJĀTAKA by Sphujidhvaja.¹²⁷⁹
 YOGARATNĀKARA by Keśavadeva.¹²⁸⁰
 YOGASĀRA.¹²⁸¹

YUKTIKALPATARU by Bhojarāja. This treatise contains an alaṃkārayukti, which deals with ratnaśāstra. Its subjects are: the mythical origin of gems (47–51; from the *Garuḍapurāṇa*); an enumeration of gems: vajra, marakata, padmarāga, mauktika, indranīla, mahānīla,¹²⁸² vaidūrya, gandhasaṃjñaka, candrakānta,¹²⁸³ sūryakānta,¹²⁸⁴ sphāṭika, pulaka, karketa, puṣparāga, jyotīrasa,¹²⁸⁵ sphāṭika (again), rājāvarta,¹²⁸⁶ rājamaya,¹²⁸⁷ saugandhika,¹²⁸⁸ gandha (or gañja), śaṅkha, brahmamaya,¹²⁸⁹ gomeda, rudhirākhyā, bhallātaka,¹²⁹⁰ dhūlī, marakata (again), tutthaka, sīsa, pīlu¹²⁹¹ (or pīta),¹²⁹² pravālaka, girivajra, bhāskara (or bhārgava, or bhāṅgura), bhujaṅgamāṇi,¹²⁹³ vajramāṇi, tittira (or tittibha),¹²⁹⁴ pīta, bhrāmara, utpala¹²⁹⁵ (52–57; from the *Viṣṇudharmottara*);¹²⁹⁶ padmarāga (58–121); vajra (122–219; 140–157 is from the *Garuḍapurāṇa*; 158–159 is from the *Viṣṇudharmottara* and *Agnipurāṇa*; 160–166 is from the *Garuḍapurāṇa*); vidruma (220–233); gomeda (234–242); muktā (243–366; 251–294 is from the *Garuḍapurāṇa*; 310–315 is from the *Matsyapurāṇa*; 316–320 is from the *Garuḍapurāṇa*); vaidūrya (367–394); indranīla (395–431; from the *Garuḍapurāṇa*); marakata (432–471; from the *Garuḍapurāṇa*); puṣparāga (472–478ab); karketana (478cd–484; from the *Garuḍapurāṇa*); bhīṣmamaṇi (485–494; from the *Garuḍapurāṇa*); pulaka (495–498); rudhirākhyā (499–501); sphāṭika (502–513; from the *Garuḍapurāṇa*); ayaskānta (514–515); śaṅkha (517–525).

Appendices

Appendix 1

Authorities associated with formulae

AGNI¹

ĀNANDA KANTHAḌĪ

saṃnipātabhairavarasa (*Bhaiṣajyaratnāvalī*, jvara 734–742).

ĀNANDAKARPAṬĪ

saṃnipātabhairavarasa (*Bṛhadrasarājasundara* 286).

ĀNANDANĀTHA

vātavidhvaṃsanarasa (*Bṛhadrasarājasundara* 452–453).

ANNAṂPOTAMADĀSA

aṅgīṇagajāṅkuśa (*Rasayogasāgara*, akārādi 97: from *Ratnākaraśadhayoga*).

AṢṬĀVAKRA

aṣṭāvakrarasa (*Rasayogasāgara*, akārādi 278).

ĀSTĪKA²

an agada (*Cikitsākalikā* 387).

mahāpadmakaghṛta (*Mādhavacikitsā*, visarpavisphoṭa 21).

padmakādighṛta (*Vaidyacintāmaṇi* 480).

padmakaghṛta (*Yogaratanākara* 715).

AŚVINS³

recipe without a name (Anantakumāra's *Yogaratanasamuccaya* 24.568–572).

agnikumārarasa (*Rasayogasāgara*, akārādi 35).

amṛtādighṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 167; *Vaidyacintāmaṇi* 377–378).

amṛtādiguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 136).

amṛtādyaghṛta (*Bhaiṣajyaratnāvalī*, vātarakta 131–137; *Bhāvaprakāśa*, cikitsā 29.102–108; *Ṭoḍara* V: 12.43–49).

amṛtādyaguggulu (*Bheṣajasaṃhitā* 6, Nr. 7; *Bṛhadyogatarāṅgīṇī* 91.65–71; *Yogaratanākara* 476–477).

amṛtāguggulu (*Bhaiṣajyaratnāvalī*, vātarakta 84–90; *Bhāvaprakāśa*, cikitsā 29.183–190; *Sahasrayoga* 214–215).

amṛtākhyaguggulu (*Ṭoḍara* V: 12.77–84).

- amṛtaprāśa (*Bhaiṣajyaratnāvalī*, rājayakṣman 275–280; *Ṭoḍara* IV: 8.89–93).
 amṛtataila (Bower MS II.418–425).
 aṅkolabījataila (*Bhāratabhaiṣajyaratnākara*, Nr. 8855).
 aśvagandhābasti (Bower MS II.618–625).
 aśvagandhāpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 8992; *Bṛhadyogatarāṅgiṇī* 147.38–42; *Pākaprādīpa* 388–392; *Rasayogasāgara*, akārādi 268).
 āśvinarasāyana (Bower MS II.773–781).
 āśvinayoga (Bower MS II.418–425).
 ayaḥpatirasa (Cat. Madras Nr. 13140: *Cikitsāsārasaṃgraha*).
 ayorājayoga (HIM I, 149 and 157).
 bālasūryodayarasa (Cat. Madras Nr. 13221: *Vaidyagrantha*).
 balāśvagandhādītaila (*Sahasrayoga* 79–80).
 bhaktottaracūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 4936; *Rasayogasāgara*, pakārādi 405).
 bhaktottarīyacūrṇa (*Bhaiṣajyaratnāvalī*, vṛddhi 59–64).
 bhallātakarasaṃyana (*Rasayogasāgara*, pakārādi 412).
 bhārgyabhaiṣavaleha (*Cikitsākalikā* 225–228).
 bhāriṅgīharītakyaavaleha (*Yogatarāṅgiṇī* 30.3–5: expounded by the two Bhiṣagvaras to Purandara).
 bilvataila (*Rasaratnadīpikā*, 148).
 bindughṛta (Bower MS II.287–312).
 bṛhadagnimukhacūrṇa (*Bṛhannighaṇṭurātṇākara* V, 18: ajūrṇa; *Gadanigraha* I, cūrṇa 128–139).
 bṛhadāśvagandhādyaghṛta (*Bṛhadyogatarāṅgiṇī* 147.77–88; Vaṅgasena, vājīkaraṇa 22–33).
 bṛhaddādīmādyaghṛta (*Bhaiṣajyaratnāvalī*, prameha 208–216; *Bhāratabhaiṣajyaratnākara*, Nr. 6762).
 bṛhadguḍapippalī (*Bhaiṣajyaratnāvalī*, plīhayakṛt 53–57; *Dhanvantari*, udara 42; *Rasārājasundara* 501; *Rasendrasārasaṃgraha*, plīharoga 65–70).
 bṛhadvāsavaleha (*Bhaiṣajyaratnāvalī*, rājayakṣman 40–45; *Sahasrayoga* 192).
 bṛhallākṣādītaila (*Bhaiṣajyaratnāvalī*, jvara 1336–1340).
 bṛhallavariṅgādicūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 6353; *Rasayogasāgara*, yakārādi 216).
 bṛhanmusalīpāka (*Pākaprādīpa* 55–68).
 bṛhannārikelakhaṇḍa (*Bhāvaprakāśa*, cikitsā 10.27–35; HIM I, 150 and 170–171; *Pākaprādīpa* 374–382).
 bṛhasindūrādyataila (*Bṛhadyogatarāṅgiṇī* 120.24–27; *Rasakāmadhenu* IV.40.583–585; *Yogarātṇākara* 694; *Vaidyacintāmaṇi* 466–467).
 candanādicūrṇa (*Bhaiṣajyaratnāvalī*, pradara 20–24; *Bhāratabhaiṣajyaratnākara*, Nr. 1698; *Rasaratnākara* II, pradara 12–17; *Vaidyacintāmaṇi* 224; *Yogarātṇākara* 307; *Yogatarāṅgiṇī* 26.17–23).
 candanādivaṭaka (*Vaidyacintāmaṇi* 118).
 candanādyacūrṇa (*Gadanigraha* I, cūrṇa 64–69; Vaṅgasena, raktapitta 93–98).
 citrakādyacūrṇa (*Rasaratnākara* II, śūla 33–40).

- citrakaharītakī (Ṭoḍara VII: 15.49–55).
 citrakaharītakyaavaleha (*Gadanigraha* I, leha 124–131ab).
 dāḍimādyaghrta (*Bhaiṣajyaratnāvalī*, prameha 203–207; *Bhāratabhaiṣajyaratnākara*, Nr. 3056; *Bhāvaprakāśa*, cikitsā 38.76–80; Ṭoḍara VI: 9.87–91).
 dāḍimāvaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 3020).
 daśamūlataila (*Bhāratabhaiṣajyaratnākara*, Nr. 3088).
 daśāṅgataila (*Bhāratabhaiṣajyaratnākara*, Nr. 3098; *Gadanigraha* I, taila 159–167).
 godhūmādyaghrta (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 277–287; *Siddhayoga* 70.22–30).
 guḍakūṣmāṇḍaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 173–179; *Siddhayoga* 70.34–40).
 guḍakūṣmāṇḍāvaleha (*Bṛhadyogatarāṅgiṇī* 147.21cd–27).
 guḍapippalī (*Dhanvantari*, udara 30; *Rasaratnāḍīpikā* 362–363).
 guḍapippalīmodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 1307).
 guḍūcītaila (*Cikitsākalikā* 306).
 gulmacūrṇa (Bower MS II.96–101).
 haridrācūrṇa (Bower MS II.216–222).
 harītakyaavaleha (*Gadanigraha* I, leha 138–140).
 hastikarṇīrasāyana (*Vaidyacentāmaṇi* 96).
 hemagarbharasāyana (*Rasayogasāgara*, śakārādi 640).
 jambvādikasarpiś (*Anantakumāra's Yogaratnasamuccaya* 9.713–720).
 jvaraharaghrta (Bower MS II.241–244).
 kapikacchūpāka (*Pākapradīpa* 424–430).
 ketakītaila (*Vaidyacentāmaṇi* 240).
 khaṇḍakūṣmāṇḍa (*Rasaratnākara* II, raktapitta 52–59; *Siddhayoga* 9.49–56; Ṭoḍara IV: 7.101–107).
 kṛmikuṭhārasa (*Rasayogasāgara*, kakārādi 321).
 kṣīrayoga (HIM I, 149 and 157).
 kṣudhārākṣasataila (D. Suresh Kumar, 1990: 100: from *Dhanvantari*).
 kumārīpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 816; *Pākapradīpa* 326–335; *Rasayogasāgara*, kakārādi 276).
 kuṅkumādyataila (*Bhaiṣajyaratnāvalī*, kṣudraroga 115–120; *Bhāratabhaiṣajyaratnākara*, Nr. 871; *Bṛhadyogatarāṅgiṇī* 127.113–119ab; *Dhanvantari*, kṣudraroga 46; Ṭoḍara VII: 12.116–121).
 kūṣmāṇḍādhilehya (*Vaidyacentāmaṇi* 225).
 kūṣmāṇḍakarasāyana (A.h.Ci.3.114–118ab; A.s.Ci.4.61–65; *Mādhavacikitsā*, raktapitta 29 and 30; *Yogatarāṅgiṇī* 26.24–29).
 kūṣmāṇḍakhaṇḍa (*Bhaiṣajyaratnāvalī*, raktapitta 94–101).
 kūṣmāṇḍarasāyana (*Sahasrayoga* 177).
 kūṣmāṇḍāvaleha (*Bṛhadyogatarāṅgiṇī* 75.72–78; *Gadanigraha* I, leha 15–20; *Rasayogasāgara*, kakārādi 314; *Yogaratnākara* 307).
 kuṣṭharākṣasataila (*Bhaiṣajyaratnāvalī*, kuṣṭha 294–298; *Dhanvantari*, kuṣṭha 54).
 kuṣṭhataila (*Bhāratabhaiṣajyaratnākara*, Nr. 878).
 laghucīṇcādhilehya (*Vaidyacentāmaṇi* 120–121).
 laghucīṇcāleha (*Rasayogasāgara*, cakārādi 101).
 lākṣādītaila (*Bhāratabhaiṣajyaratnākara*, Nr. 6287).

- laṣunādyaghṛta (Bower MS II.223–225).
 lavaṅgādyamodaka (*Bhaiṣajyaratnāvalī*, agnimāndyādi 245–250;
Bhāratabhaiṣajyaratnākara, Nr. 6354; *Sahasrayoga* 217–218).
 madhyamadaśamūlataila (*Bhaiṣajyaratnāvalī*, śīroroga 90–93; *Dhanvantari*, śīroroga 23).
 mahābhallātakarasaṣyana (*Vaidyacintāmaṇi* 460–461).
 mahāciṇcādilehya (*Vaidyacintāmaṇi* 240–241).
 mahādādimādyaghṛta (*Bhaiṣajyaratnāvalī*, prameha 217–222;
Bhāratabhaiṣajyaratnākara, Nr. 5238).
 mahākalkarasa (*Napuṃsakāmṛtārṇava* 9.39–50).
 mahākūṣmāṇḍakasarpis (*Sahasrayoga* 58).
 mahālākṣāditaila (*Dhanvantari*, jvara 126; *Rasaratnadīpikā* 97–98).
 mahālavaṅgādyacūrṇa (*Bhaiṣajyaratnāvalī*, grahaṇī 75–82).
 mahāparangādirasaṣyana (*Vaidyacintāmaṇi* 297).
 mahāsugandhitaila (*Bhāratabhaiṣajyaratnākara*, Nr. 5307; *Napuṃsakāmṛtārṇava* 2.70–72; *Siddhayoga* 70.31–33; *Yogarātnākara* 919).
 māhiṣākhyaguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 5186).
 mārtaṇḍarasa (Cat. Madras Nr. 13190: *Ratnākaraśādhayogagrantha*).
 mātuluṅguṅṇikā (Bower MS II.75–77 and 85–86).
 nāgabalātaila (*Vaidyacintāmaṇi* 377).
 nārikelāmṛta (*Bhaiṣajyaratnāvalī*, śūla 242–251; *Bhāratabhaiṣajyaratnākara*, Nr. 3472; *Dhanvantari*, śūla 37; *Rasaratnākara* II, amiapitta 68–79; *Vaṅgasena*, amlapitta 66–77).
 nimbapañcāṅgarasaṣyana (Ananta's *Yogarātnasamuccaya* 30.124–127).
 pāṇḍurogāntakarasa (*Rasayogasāgara*, pakārādi 105).
 pārāṅgyādirasaṣyana (*Rasayogasāgara*, pakārādi 121).
 phalaghṛta (Anantakumāra's *Yogarātnasamuccaya* 21.23–29; *Basavarājī* ya 250;
Gadanigraha I, ghṛta 142–149; *Rasaratnākara* II, yonivyādhi 9–16;
Yogarātnākara 848).
 phalakalyāṇaghṛta (*Bhaiṣajyaratnāvalī*, yonivyāpad 78–84).
 pippalīvardhamānakalpa (Bower MS II.716–737).
 pippalyādirasaṣyana (*Sahasrayoga* 209).
 pippalyādyavaleha (*Gadanigraha* I, leha 300–305).
 piyūṣavallīrasa (*Bhaiṣajyaratnāvalī*, grahaṇī 334–345; *Bṛhadrasarājasundara* 347–348).
 pramehagajasiṃha (*Rasaratnadīpikā* 327–328).
 punarnavāguggulu (HIM I, 149 and 167).
 rājarasaṣyana (*Vaṅgasena*, nāsāroga 35–39).
 rasādīcūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 6107; *Rasayogasāgara*, yakārādi 125;
 Ṭoḍara V. 5.49–50; *Vaidyacintāmaṇi* 429; *Yogarātnākara*, 399).
 a rasāyana (Nīścala ad *Cakradatta*, nāsāroga 29–31: two formulae, from Candrāta and the *Nāvanītakasaṃhitā*).
 rasāyanāriṣṭa (*Gadanigraha* I, āsava 304–311).
 śailūṣādirasaṣyana (*Vaidyacintāmaṇi* 296).

samaśarkaraguggulu (*Bhāvaprakāśa*, cikitsā 29.170–176; *Rasaratnākara* II, kuṣṭha 264–268).
 śaṅkhaṣuṣpādyaghrta (*Gadanigraha* I, ghrta 135, add.).
 sarveśvaracūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 8192; *Rasayogasāgara*, śakārādi 351).
 śatāvarīghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 7360; *Gadanigraha* I, ghrta 130–135).
 śatāvarīsarpiś (Anantakumāra's *Yogaratanasamuccaya* 30.151–169).
 saubhāgyaśuṇṭhīpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 8302; *Pākapradīpa* 214–228).
 sindūradyataila (*Bhāratabhaiṣajyaratnākara*, Nr. 7990).
 śrīgopālataila (*Bhaiṣajyaratnāvalī*, vātavyādhi 289–300; *Bhāratabhaiṣajyaratnākara*, Nr. 7426; *Bheṣajasaṃhitā* 12, Nr. 71).
 svalpakadalīkhaṇḍaghrta (HIM I, 150 and 176: from the *Samkṣiptasāra*).
 tṛṣṇāhararasa (*Rasakāmadhenu* IV.3.7–8).
 uttamāgnikumārarasa (*Vaidyacintāmaṇi* 69).
 vajraharitakī (Anantakumāra's *Yogaratanasamuccaya* 13.103–124).
 vāntāntakarasa (*Basavarājīya* 98; *Rasayogasāgara*, yakārādi 476; *Vaidyacintāmaṇi* 194–195).
 viṣaharaghrta (Bower MS II.251–257).
 vyāghrītāila (*Vaidyacintāmaṇi* 209).

ĀTREYASŪRI

sudhāpippalīyoga (*Rasayogasāgara*, śakārādi 419).

AVALOKITEŚVARA⁴

BAHUGHĀTIYOGINĪ

vṛkodaraguṭikā (*Rasaratnasamuccaya* 21.130–132; *Rasayogasāgara*, yakārādi 584).

BHAGAVANT

mahākumārītāila (*Vaidyacintāmaṇi* 238).

BHAIRAVA

ardhanārīṇaśeśvararasa (*Rasayogasāgara*, akārādi 237).
 ardhannārīśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8911; *Rasakāmadhenu* IV.1.233–236).
 bhairavarasa (*Bhaiṣajyaratnāvalī*, upadaṃśa 32–48; *Rasayogasāgara*, pakārādi 454; *Rasendrasārasaṃgraha*, upadaṃśa 5–21).
 bhairavarasāyana (*Rasakāmadhenu* IV.1.264–265).
 candrānanarasa (*Bṛhadrasarājasundara* 507; *Rasendracintāmaṇi* 183; *Rasendrasārasaṃgraha*, kuṣṭha 13–14).
 cintāmaṇīrasa (*Bhaiṣajyaratnāvalī*, jvara 691–695; *Bṛhadrasarājasundara* 285; *Dhanvantari*, jvara 135; *Rasayogasāgara*, cakārādi 109; *Rasendrasārasaṃgraha*, jvara 76–79).

jvarabhairavacūrṇa (*Basavarājīya* 43; *Bhaiṣajyaratnāvalī*, jvara 455–466; *Bhāratabhaiṣajyaratnākara*, Nr. 2142; *Rasayogasāgara*, cakārādi 216).
 a dhūma (*Dhanvantari*, upadaṇśa 18).
 jvarāṅkuśarasa (*Bṛhadrasarājasundara* 255).
 mahābhairavarasa (*Vaidyacintāmaṇi* 66).
 mustakādīmodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 185–190; *Bhāratabhaiṣajyaratnākara*, Nr. 5181).
 pārādādidhūpa (*Bhāratabhaiṣajyaratnākara*, Nr. 4385; *Rasayogasāgara*, pakārādi 126).
 rasacūdāmaṇi (*Ṭoḍara* III: 4.249–256).
 śaṅkhadrāvarasa (*Rasayogasāgara*, śakārādi 20).
 sarveśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8195; *Bṛhadrasarājasundara* 252; *Rasayogasāgara*, śakārādi 359).
 sūcikābharaṇarasa (*Dhanvantari*, jvara 100; *Rasendrasārasaṃgraha*, jvara 145–146).
 svacchandabhairavarasa (*Vaidyacintāmaṇi* 194).
 vātanāśanarasa (*Rasaprakāśasudhākara* 8.118–120).

BHAIRAVANĀTHA

pañcāmṛtaparpati (*Bṛhadrasarājasundara* 407–408; *Rasaratnasamuccaya* 14.77–97).

BHĀNU

parahitarasa (*Rasaratnasamuccaya* 20.83–88).

BHĀNUDĀSA

kuṭa jāleha (*Bhāratabhaiṣajyaratnākara*, Nr. 791; *Dhanvantari*, atisāra 27).
 kuṭa jāṣṭaka (*Dhanvantari*, atisāra 28).

BHAVA

jvarakālaketurasa (*Bhaiṣajyaratnāvalī*, jvara 1031–1032; *Bṛhadrasarājasundara* 308; *Rasayogasāgara*, cakārādi 196).

BHŪTEŚVARA

bhūteśvararasa (*Rasayogasāgara*, pakārādi 448; *Vaidyacintāmaṇi* 39).

BODHISATTVA⁵

siṃhyamṛtaghṛta (*Bhaiṣajyaratnāvalī*, arśas 192–193; *Cakradatta*, arśas 105–106; *Ṭoḍara* IV: 3.172–173).

BRAHMĀ⁶

recipe without a name (Anantakumāra's *Yogaratnasamuccaya* 16.150–159; *Dhanvantari*, viśa 41).

amṛtasamjīvanarasāyana (*Rasayogasāgara*, akārādi 187).

bhāskarādyaghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 4877; Vaṅgasena, netraroga 411–414).

- bhāskaraghṛta (Tṛḍara VII: 16.325–330).
 bhūnimbādyacūrṇa (*Bhāratabhāṣajyaratnākara*, Nr. 4839).
 bṛhadagnimukhacūrṇa (*Bṛhannighaṇṭurātṇākara* V, 18: aṇṛṇa; *Gadanigraha* I, cūrṇa 128–139).
 bṛhaddhānvantaraghṛta (*Bhāratabhāṣajyaratnākara*, Nr. 6763).
 bṛhatsārasvatacūrṇa (*Gadanigraha* I, cūrṇa 155–158).
 candraprabhāguṭikā (*Gadanigraha* I, guṭikā 188–191).
 caturmukharasa (*Bheṣajaṣaṃhitā* 1, Nr. 106; *Yogarātṇākara* 328).
 daśāṅgadhūpa (*Bhāratabhāṣajyaratnākara*, Nr. 3160; Vaṅgasena, viṣa 121–125).
 daśasārasarpis (Cat. Madras Nr. 13220: *Vaidyakagrantha*).
 hiṅgulākhyarasa (*Rasaratnāḍipikā* 60).
 hutāśanarasa (*Yogarātṇākara* 282–283).
 kalyāṇarasa (*Rasayogasāgara*, kakārāḍi 116; *Vaidyacintāmaṇi* 41).
 karṇāmṛtataila (*Rasaṣaṃketakalikā* 5.35–37).
 lauhāmṛta (*Bhāṣajyaratnāvalī*, śūla 163–168).
 lohāmṛta (*Rasayogasāgara*, yakārāḍi 316).
 mācikasava (*Bhāratabhāṣajyaratnākara*, Nr. 5337; *Gadanigraha* I, āsava 142–146ab).
 mahārāśnāḍikvātha (*Bheṣajaṣaṃhitā* 14, Nr. 89; *Sahasrayoga* 33–34;
 Śārngadharaṣaṃhitā II.2.88–94; *Yogarātṇākara* 451).
 mṛtasaṇḍijvanāgada (*Bhāratabhāṣajyaratnākara*, Nr. 5716; *Cakradatta*, viṣa 32–38;
 Ca.Ci.23.54–60).
 nakhaparīkṣā (Tṛḍara II: 6.109–110).
 nīlakaṇṭharasa (*Bhāṣajyaratnāvalī*, rasāyana 61–65; *Bṛhadrasarājasundara* 542;
Rasendrasārasaṃgraha, rasāyana 86–90; *Sahasrayoga* 239).
 pañcasneha (*Sahasrayoga* 104).
 pāṣāṇābhedaḍāka (*Pākapraḍīpa* 336–344: given to Cyavana).
 pippalyāḍirasāyana (*Vaidyacintāmaṇi* 96).
 a rasāyana (A.h.U.39.15–23).
 sarvāṅgasundararasa (*Bhāratabhāṣajyaratnākara*, Nr. 8182).
 somarājīghṛta (*Bhāṣajyaratnāvalī*, kuṣṭha 250–256; *Bhāratabhāṣajyaratnākara*, Nr. 7965).
 sudarśanacūrṇa (Tṛḍara III: 4.1194–1203).
 sūryaprabhā guṭikā (*Vaidyacintāmaṇi* 103; *Yogarātṇākara* 323).
 sūryavaṭī (*Rasayogasāgara*, śakārāḍi 538).
 sūtikāghnarasa (*Bhāṣajyaratnāvalī*, sūtikārōga 70–71; *Bhāratabhāṣajyaratnākara*,
 Nr. 8265; *Rasayogasāgara*, śakārāḍi 513; *Rasendrasārasaṃgraha*, sūtikā 10–11).
 vātakulāntakarasa (*Bhāṣajyaratnāvalī*, apasmāra 26–30; *Bhāratabhāṣajyaratnākara*,
 Nr. 6981; *Bṛhadrasarājasundara* 448; *Dhanvantari*, apasmāra 21;
Rasayogasāgara, yakārāḍi 449; *Rasendrasārasaṃgraha*, apasmāra 9–12).
 vijayabhairavarasa (*Basavarājīya* 143; *Bhāṣajyaratnāvalī*, kāsa 80–83;
Vaidyacintāmaṇi 199, 257).
 vijayaguṭikā (*Basavarājīya* 305).
 vijayānandarasa (*Bṛhadrasarājasundara* 520; *Rasendrasārasaṃgraha*, kuṣṭha
 109–113).

BRAHMAJYOTIS

vardhamānarasa (*Rasaratnasamuccaya* 22.30–40).

BRAHMASUTA

kāmeśvaramodaka (*Bhaiṣajyaratnāvalī*, vājikaṛaṇa 180–185; Ṭoḍara IV: 2.164–168).

BUDDHA⁷

BUDDHAMUNI

khageśvararasa (*Rasaratnasamuccaya* 20.100–103; *Rasayogasāgara*, kakārādi 356).

BUDDHINĀTHA

pramadebhāṇkuśarasa (*Bṛhadhyogataṅgiṇī* 147.278–297).

CAKRAPĀṆI

śaṅkhaṇṇīrasa (*Sahasrayoga* 241–242).

CAMPAKĀRAṆYAVĀSINAH⁸

jayasundararasa (*Rasaratnasamuccaya* 22.5–14; *Rasayogasāgara*, cakārādi 164).

CANDRA⁹

candrāvaleha (*Rasaratnasamuccaya* 21.172–176).

kṣudrāharītakūlehya (*Vaidyacinṭāmaṇi* 98–99).

mahādrākṣādicūrṇa (*Rasayogasāgara*, takārādi 326).

CANDRANĀTHA

agnigarbhavaṭī (*Rasayogasāgara*, akārādi 61).

āmagaḥjaṣiṇṇhamodaka (*Bhaiṣajyaratnāvalī*, āmavāta 127–134).

āmavātagajendramodaka (*Rasaratnādīpikā* 302–303).

bhāskararasa (*Bhaiṣajyaratnāvalī*, agnimāndyādi 128–131;

Bhāratabhaiṣajyaratnākara, Nr. 4948).

candrāmṛtalauha (*Bhaiṣajyaratnāvalī*, kāsa 121–126; *Bhāratabhaiṣajyaratnākara*, Nr.

1902; *Bṛhadrasarājasundara* 420–421; *Rasendrasārasaṃgraha*, kāsa 75–80).

candrāmṛtaloha (*Dhanvantarī*, kāsa 26; *Rasayogasāgara*, cakārādi 69).

candrāmṛtaparpaṭī (*Bṛhadrasarājasundara* 414).

candrāmṛtarasa (*Basavarājīya* 144–145; *Bhaiṣajyaratnāvalī*, kāsa 62–70;

Rasayogasāgara, cakārādi 68; *Vaidyacinṭāmaṇi* 257).

candrāmṛtavaṭī (*Bheṣajasaṇṇhitā* 1, Nr. 113; *Rasayogasāgara*, cakārādi 70).

kuṣṭhaśailendraraśa (*Rasaratnākara* II, kuṣṭha 217–226).

sarvajvaraharalauha (*Rasayogasāgara*, śakārādi 308; *Rasendrasārasaṃgraha*, jvara 233–239).

śiraḥśūlādivajjarasa (D. Suresh Kumar, 1990: 100: from *Dhanvantarī*).

śirovajjarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 7589; *Rasayogasāgara*, śakārādi 80;

Rasendrasārasaṃgraha, śīroroga 6–10).

śrīcandrāmṛtaloha (D. Suresh Kumar, 1990: 100: from *Dhanvantari*).
 śukramātrkā vaṭī (*Bhaiṣajyaratnāvalī*, prameha 73–78).
 śūlavajriṇī guṭikā (*Dhanvantari*, śūla 42; *Rasaratnākara* II, śūla 77–85).
 śūlavajriṇī vaṭī (*Bhaiṣajyaratnāvalī*, śūla 99–104; *Dhanvantari*, śūla 42).
 śūlavajriṇī vaṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 7661).

CANDRAŚIKHARA

muktārājamṛgāṅkarasa (*Rasapaddhati* 199).

CATURMUKHA

caturmukharasa (*Bhaiṣajyaratnāvalī*, vātavyādhi 149–155; *Bṛhadrasarājasundara* 451;
Dhanvantari, vātavyādhi 101; *Rasayogasāgara*, cakārādi 28; *Rasendracintāmaṇi*
 95; *Rasendrasārasaṅgraha*, vātavyādhi 38–44).

DANḌAPĀNI

siṃhanādaguggulu (*Bhaiṣajyaratnāvalī*, āmavāta 190–195;
Bhāratabhaiṣajyaratnākara, Nr. 7923; *Bhāvaprakāśa*, cikitsā 29.222–228 and
 237–246; *Ṭoḍara* V: 14.61–67; *Vaidyacintāmaṇi* 387).

DASRAS¹⁰

dāḍimādyaghṛta (*Bṛhadhyogatarāṅgiṇī* 103.87–90).
 kapikacchūpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 9310; *Bṛhadhyogatarāṅgiṇī*
 147.146–152).
 lakṣmaṇāluha (*Bhaiṣajyaratnāvalī*, pradara 84–86).
 lakṣmaṇāloha (*Rasayogasāgara*, yakārādi 223).
 lakṣmaṇātaila (*Bhāratabhaiṣajyaratnākara*, Nr. 6330).
 mahākalka (*Rasaratnasamuccaya* 27.128–144).
 mahāsugandhitaila (*Bṛhadhyogatarāṅgiṇī* 147.381–383).
 vāsākūṣmāṇḍaleha (*Rasakāmadhenu* IV.9.47–48).

DEVADEVA

bastyāmayāntaka (Anantakumāra's *Yogaratnasamuccaya* 15.84–95ab).
 br̥hadvāsavāvaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 7012).
 citrakādicūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 1725; *Rasayogasāgara*, cakārādi 102).
 kusumbhādyatila (*Gadaniṅgraha* I, taila 170–174).
 madanānandamodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 242–266;
Bhāratabhaiṣajyaratnākara, Nr. 5498; *Bheṣajasaṃhitā* 6, Nr. 77).
 sarveśvaracūrṇa (*Rasaratnākara* II, śūla 24–32).

DEVADEVAMUNI

tālakesvararasa (*Rasakāmadhenu* IV.40.438–441).

DEVARĀJA

pañcānanarasa (*Rasaratnasamuccaya* 19.54–64).

DEVENDRA

vārāhyādighṛta (*Sahasrayoga* 45).

DEVĪ

agnikumāraraśa (*Rasaratnasamuccaya* 18.178–195).

bṛhatsārasvataghṛta (*Rasaratnadīpikā* 276).

DHARMAPĀLA

tāmrasasāyana (*Bhāratabhaiṣajyaratnākara*, Nr. 2597; *Rasayogasāgara*, takārādi 48; Vaṅgasena, rasāyana 69–92).

GARUḌA

agnimukbarasa (*Rasakāmadhenu* IV.22.43–47).

GIRIJATANAYĀVALLABHA (compare Giritanayāvallabha)

mahārāśnādīkvātha (*Bhāratabhaiṣajyaratnākara*, Nr. 5885).

GIRIRĀJAPUTRĪ

pratāpalanīśvararasa (Vaṅgasena, strīroga 299–301).

śītaṭṭvarāṇyakṛśṇanūmegha (*Rasayogasāgara*, śakārādi 115).

GIRĪŚA

bṛhacchivaguṭikā (*Gadanigraha* I, guṭikā 216–238; Vaṅgasena, vātarakta 191–212).

candrodayarasa (*Rasendracintāmaṇi* 69–70).

mṛtyuñjayarasa (*Bṛhadhyogatarāṅgī* 147.263–264; *Rasayogasāgara*, pakārādi 681).

rasasārdūla (HIM I, 40 and 59–60).

a rasāyana (*Rasendracūḍāmaṇi* 14.114).

GIRITANAYĀVALLABHA (compare Girijatanayāvallabha)

mahārāśnādīkaśāya (*Vaidyacintāmaṇi* 187).

mahārāśnādīkvātha (*Yogaratnākara* 450).

rāśnādīkvātha (*Sahasrayoga* 34).

GOPĀLADĀSA

kuṭaṭṭjaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 791).

HARA

kalyāṇasundarābhra (*Rasayogasāgara*, kakārādi 117).

kuṣṭhahararasa (*Rasayogasāgara*, kakārādi 300).

śītabhañjanarasa (*Rasayogasāgara*, śakārādi 121; *Vaidyacintāmaṇi* 43).

śūlarājaloḥa (*Bhaiṣajyaratnāvalī*, śūla 132–136; *Bhāratabhaiṣajyaratnākara*, Nr.

7660; *Rasendrasārasaṃgraha*, śūla 24–28).

śūlarājaloḥa (*Dhanvantari*, śūla 52).

viṣayaparpatī (*Bhaiṣajyaratnāvalī*, grahaṇī 485–491).

HARAPĀDA

pramehagajakesarīrasa (*Rasayogasāgara*, pakārādi 265).

HARI

drutisārarasa (*Rasaratnasamuccaya* 22.41–46).

himapānaka (*Siddhaprayogalatikā* 28.11–13).

kālakandhararasa (*Rasayogasāgara*, kakārādi 211; *Vaidyacintāmaṇi* 40).

HARIPĀDA

mehagajakesarirasa (*Vaidyacintāmaṇi* 295).

HASTIN

śuṛṭhīpāka (*Rasayogasāgara*, śakārādi 149).

INDRA¹¹

daśamūlyādyataila (*Gadanigraha* I, taila 412–421: given by Surendra to Nanda in order to protect Bālakṛṣṇa).

INDRAMUNI

śleṣmaśailendrarasa (*Bṛhadrasarājasundara* 313).

INDUŚEKHARA

induśekhhararasa (*Bhaiṣajyaratnāvalī*, garbhiṇīroga 94–98; *Rasayogasāgara*, akārādi 349).

ĪŚA

śivāmodaka (*Bhaiṣajyaratnāvalī*, bālaroga 105–111).

vetālarasa (*Bhaiṣajyaratnāvalī*, jvara 605–612).

ĪŚĀNA

āmavātārivaṭikā (*Rasendrasārasaṃgraha*, āmavāta 1–6).

ĪŚVARA

haragaurīrasa (Harṣakīrti's *Yogacintāmaṇi* 239–240).

kālāgnirudrarasa (*Rasayogasāgara*, kakārādi 234; *Vaidyacintāmaṇi* 67).

kālakūṭarasa (*Basavarājīya* 61–62).

rājayoga (*Bhāratabhaiṣajyaratnākara*, Nr. 5928; *Gadanigraha* I, cūrṇa 377–384ab).

śītanāgāṅkuśarasa (*Sahasrayoga* 235).

sūryapāvakarasa (*Rasayogasāgara*, śakārādi 530; *Vaidyacintāmaṇi* 43).

JANAKEŚVARA

samasaktukaghṛta (Bower MS II.454–459).

KACA

nalāmūlādi (*Cakradatta*, mūtrāghāta 10).

KĀLĀGNIRUDRA

rudrataila (*Bhaiṣajyaratnāvalī*, śīroroga 126–133; *Dhanvantari*, śīroroga 26).

KĀLAKAṆṬHA

kālakaṇṭharasa (*Vaidyacintāmaṇi* 197).

KĀLANĀTHA

kāleśvararasa (*Rasayogasāgara*, kakārādi 247).

mahākāleśvararasa (*Bhaiṣajyaratnāvalī*, kāsa 74–79; *Bhāratabhaiṣajyaratnākara*, Nr. 5537).

KĀLAPĀDA

bṛhatsvāyambhuvaguggulu (*Gadanigraha* I, guṭikā 365–371).

KĀMADEVA¹²

aśvagandhārasāyana (*Vaidyacintāmaṇi* 97).

kāmadevaghṛta (*HIM* II, 293–295).

methīmodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 171–177; *Bhāratabhaiṣajyaratnākara*, Nr. 5184).

śrīmadānandamodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 242–266).

KAMALĀ

nārāyaṇarasa (*Vaidyacintāmaṇi* 38).

KAMALĀKARA

vamanāmṛtayoga (*Bhāratabhaiṣajyaratnākara*, Nr. 6966; *Bṛhadrasarājasundara* 441; *Vaidyacintāmaṇi* 680).

KĀŚIKA

mañjiṣṭhādyāgada (*Bhāratabhaiṣajyaratnākara*, Nr. 5684; *Vaṅgasena*, viṣa 137).

KATHAṆḌINĀTHA

a recipe (*Ṭoḍara* III: 4.407).

KESARIN

kākolyādighṛta (*Rasaratnākara* II, vātarakta 91–95).

pañcānanarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 4278; *Rasaratnākara* II, āmavāta 50–60).

KUMĀRAKAS¹³

romavedharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 6159).

LĀĪ

bṛhallācūrṇa (*Bṛhadrasarājasundara* 332–333).

lācūrṇa (*Rasakāmadhenu* IV.14. 141–143; *Rasayogasāgara*, yakārādi 249).

LĀIKĀ

lācūrṇa (Ṭoḍara IV: 2.128–134).

LALITANĀTHA

lalikanātharasa (*Rasakāmadhenu* IV.7.7–16; *Rasayogasāgara*, yakārādi 214).

LOKANĀTHA

dr̥ṣṭaphalāpanīyavaṭikā (*Bṛhadrasarājasundara* 276–277).

jvaramānāṅkeśarirasa (*Bhaiṣajyaratnāvalī*, jvara 875–880; *Bṛhadrasarājasundara* 296; *Rasayogasāgara*, cakārādi 223).

lokanātharasa (*Rasakāmadhenu* IV.1.425–434).

pānīyavaṭikā (*Bhaiṣajyaratnāvalī*, jvara 668–687; *Bhāratabhaiṣajyaratnākara*, Nr. 4332; *Rasayogasāgara*, pakārādi 118).

LOKASENA

sārasvatacūrṇa (*Gadanigraha* I, cūrṇa 151–154).

MADANAGOPĀLA

candrakāntarasa (*Rasayogasāgara*, cakārādi 47).

MADHUSŪDANA

bṛhacchāgalādighṛta (*Rasaratnadīpikā* 274–276).

MAHĀDEVA

bṛhadvāsāvaleha (*Bhaiṣajyaratnāvalī*, rājayakṣman 46–52).

candanādicūrṇa (Ṭoḍara IV: 7.60–67).

dadhikāsavidhūnanarasa (*Basavarājīya* 146).

hemagarbhapoṭṭalīrasa (Ṭoḍara III: 4.1134–1143).

lakṣmīvilāsarasa (*Bhaiṣajyaratnāvalī*, kṣa 130–137).

mahābhallātaka (Ṭoḍara VII: 5.251–264).

mahābhallātakaḡuḡa (*Bhaiṣajyaratnāvalī*, kuṣṭha 207–221; *Dhanvantari*, kuṣṭha 44).

mahābhallātakāvaleha (*Bhāvaprakāśa*, cikitsā 54.84–94; *Pākapradīpa* 469–482).

mahākālāgnirudrarasa (*Rasayogasāgara*, kakārādi 233; *Vaidyacinṭamaṇi* 70).

mahākāleśvararasa (*Rasakāmadhenu* IV.1.3 16–321).

mahākāmeśvaramodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 225–241; *Dhanvantari*, vājīkaraṇa 13; *Rasaratnākara* II, vājīkaraṇa 93–101; *Rasayogasāgara*, kakārādi 195).

mārkaṇḡeyacūrṇa (*Bhaiṣajyaratnāvalī*, grahaṇī 113–117; *Rasayogasāgara*, pakārādi 571).

pānīyabhaktavaṭikā (*Rasaratnadīpikā* 169).

sahadevīprayoga (*Rasaratnasamuccaya* 24.142).
 sūcikābharaṇarasa (*Rasayogasāgara*, śākārādi 473).
 sūtabhasmaprayoga (*Bṛhadrasarājasundara* 447; *Dhanvantari*, apasmāra 19;
Rasayogasāgara, śākārādi 481; *Rasendrasārasaṃgraha*, apasmāra 4).
 taptarājataila (*Dhanvantari*, śiroroga 27).
 vijayādivatī (*Bhaiṣajyaramāvalī*, yonivyāpad 65–67).
 yogesvararasa (*Bhaiṣajyaratnāvalī*, prameha 111–115; *Rasendrasārasaṃgraha*,
 prameha 51–55).
 recipe without a name (*Kāmarama* 13.65–66).

MAHĀGURU

mahāpramehāntakarasa (*Rasayogasāgara*, pakārādi 293).

MAHEŚA

bṛhadagnikumārarasa (*Bhaiṣajyaratnāvalī*, agnimāndyādi 117–122;
Rasendrasārasaṃgraha, ajīṣṇa 16–20).
 candanāsava (*Bhāratabhaiṣajyaratnākara*, Nr. 1812).
 caturbhujarasa (*Bhaiṣajyaratnāvalī*, unmāda 52–57; *Bhāratabhaiṣajyaratnākara*, Nr.
 1879; *Dhanvantari*, unmāda 37; *Rasayogasāgara*, cakārādi 26;
Rasendrasārasaṃgraha, unmāda 20–26).
 jyotiṣmān rasali (*Bhaiṣajyaratnāvalī*, kuṣṭha 178–185; *Rasayogasāgara*, pariśiṣṭa 58).
 kālakūṭarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 9499; *Rasayogasāgara*, kakārādi 213).
 kṣmidrumakuṭhārarasa (*Rasakāmadhenu* IV.20.5–7; *Rasayogasāgara*, kakārādi 329).
 mahānṛtyuñjayarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 5559; *Bṛhadrasarājasundara*
 501; *Rasendrasārasaṃgraha*, plīharoga 60–64).
 manmathābharrasa (*Rasayogasāgara*, pakārādi 532).
 rājavallabharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 6137; *Rasendrasārasaṃgraha*,
 grahaṇī 136–140).
 śrīmanmatharasa (*Bṛhadrasarājasundara* 536; *Rasendrasārasaṃgraha*, rasāyana 2–9).

MAHEŚVARA

mahārājanṛpativallabharasa (*Bhaiṣajyaratnāvalī*, grahaṇī 371–380;
Bhāratabhaiṣajyaratnākara, Nr. 5564; *Rasendrasārasaṃgraha*, grahaṇī 146–155).
 nṛpativallabharasa (*Rasayogasāgara*, takārādi 459).

MAKAREŚVARA

rasālā (HIM I, 40 and 68; from *Bhāvaprakāśa*).

MAÑIBHADRA¹⁴

māñibhadraguḍa (*Sahasrayoga* 178).
 māñibhadramodaka (HIM III, 746 and 747–748; *Cakradatta*, *Śataśloki*, *Siddhayoga*;
 compare A.h.Ci.19.31–32).
 māñibhadrataila (Bower MS III.10–14).
 māñibhadravaṭaka (*Gadanigraha* I, guṭikā 65–66; bestowed to Śākyabhiṣu).

viḍaṅgasārādyā guṭikā (HIM III, 746 and 748: from *Gadanigraha*; compare A.h.Ci.19.31–32).

MAÑJUNĀTHA

ardhanārīṇaṭeṣvararasa (*Rasayogasāgara*, akārādi 233).

MAÑJUŚRĪ¹⁵

MATHANABHIṢAJ

trayastrīṣaṭkvātha (*Gadanigraha*, kāya, jvara 480–481).

MATSYENDRA

rāmabāṇarasa (*Rasayogasāgara*, yakārādi 173).

MĀTULA

uśabāvaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 9116).

MṚGACĀRIN

rājamṛgāṅkarasa (*Rasaratnasamuccaya* 17.92–99).

MṚTYUÑJAYA

ratnagarbhapotṭalī (Ṭoḍara III: 4.1144–1153).

vasantatilakarasa (*Bṛhadrasarājasundara* 541; HIM I, 40 and 55; Vṛddhatrayī 331).

MŪLADEVA

kāmāgnisaṇḍīpanamodaka (*Bṛhadrasarājasundara* 550; *Rasayogasāgara*, kakārādi 183).

MUNI

bṛhajjvarāṅkuśarasa (*Bṛhadrasarājasundara* 318).

NAKULA

snāyvantakarasa (*Rasayogasāgara*, śakārādi 575).

NANDIN

agnikumārarasa (*Rasaratnasamuccaya* 18.178–195; *Rasayogasāgara*, akārādi 49).

amṛtāṇavarasa (*Rasaratnasamuccaya* 27.75–83; *Rasayogasāgara*, akārādi 199).

grahaṇīga jakesarīrasa (*Rasaratnasamuccaya* 16.73–83; *Rasayogasāgara*, kakārādi 538).

medinīsārarasa (*Rasaratnasamuccaya* 20.117–123; *Rasayogasāgara*, pakārādi 714).

mehahararasa (*Rasaratnasamuccaya* 17.100–107).

pramehahararasa (*Rasayogasāgara*, pakārādi 290).

sarveśvaraparpatī (*Rasaratnasamuccaya* 18.2–16).

vātarājavaṭī (*Bhāratabhaiṣajyaratnākara* Nr. 6994; *Bṛhadrasarājasundara* 457).

vātavidhvamsanarasa (*Bhāratabhaiṣajyaratnākara* Nr. 700; *Rasaratnasamuccaya* 21.118–129).

NANDINĀTHA

mahāmṛgāṅkarasa (*Rasendrasārasaṃgraha*, yakṣman 80–87).

vātavidhvamsanarasa (*Bhaiṣajyaratnāvalī*, vātavyādhi 182–189;

Bhāratabhaiṣajyaratnākara, Nr. 7000; *Rasayogasāgara*, yakārādi 471;

Rasendrasārasaṃgraha, vātavyādhi 59–65).

NANDĪŚVARA

mahodayapratyayasāraraśa (*Bhāratabhaiṣajyaratnākara*, Nr. 5593;

Rasaratnasamuccaya 15.41–49).

NĀRĀYAṆA

candanāditailla (*Vaidyacintāmaṇi* 299).

mahānārāyaṇatailla (*Bhaiṣajyaratnāvalī*, vātavyādhi 343–354).

nārācarasa (*Vaidyacintāmaṇi* 237).

nārāyaṇacūrṇa (*Bhaiṣajyaratnāvalī*, atisāra 103–106; *Bhāratabhaiṣajyaratnākara*, Nr. 3436; *Dhanvantari*, atisāra 25).

śatāvarīnārāyaṇatailla (*Bṛhadयोगतरङ्गिणी* 90.220–231; *Vaidyacintāmaṇi* 207; *Yogaratanākara* 458).

śatāvarīrasāyana (*Vaidyacintāmaṇi* 243).

siddhārthatailla (Bower MS III.36–53).

NĀSATYAS¹⁶

māṇikyatilakarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 5597).

NĀTHA

śarkarāleha (*Rasaratnadīpikā* 335).

NĀYIKĀ

nāyikācūrṇa (*Dhanvantari*, grahaṇī 15).

NĪLAKAṆṬHA

rajaḥpravartinīvaṭī (*Bhaiṣajyaratnāvalī*, yonivyāpad 58–60).

śrīnīlakaṇṭharasa (*Bhaiṣajyaratnāvalī*, rasāyana 144–150).

NITYANĀTHA

bhṛṅgāmalaakatailla (*Vaidyacintāmaṇi* 240).

gulmavajirīṇī vaṭī (*Bṛhadrasarājasundara* 477).

siṃhanādarasa (*Vaidyacintāmaṇi* 197).

NIVĀRAṆA

māṇibhadramodaka (Tṭṭara IV: 3.105–106).

NR̥HARI, THE SON OF JAYADEVA
kuberākṣādicūrṇa (*Vaidyacintāmaṇi* 326).

PARVATARĀJAPUTRĪ
cintāmaṇirasa (*Vaidyacintāmaṇi* 87).

PĀRVATĪ
cintāmaṇirasa (*Bhāratabhaiṣajyaratnākara*, Nr. 1932; *Rasayogasāgara*, cakārādi 120;
Yogarātnākara 335).
śāmbhavīrasa (*Rasayogasāgara*, śakārādi 75; *Vaidyacintāmaṇi* 40).

PĀRVATĪKĀNTA
śucikābharaṇarasa (*Rasayogasāgara*, śakārādi 467).

PĀRVATĪPATI
vātavaḥjarasa (*Vaidyacintāmaṇi* 198).

PINĀKIN
kaulītikā vartiḥ (*Gadanigraha*, śālākya, netraroga 272–275;
Bhāratabhaiṣajyaratnākara, Nr. 9452).
rājayakṣmaharasa (*Rasayogasāgara*, yakārādi 152).
śāmbhavīrasa (*Rasayogasāgara*, śakārādi 75).
svaṇṣasindūra (HIM I, 40 and 78–79: from the *Samkṣiptasāra*; *Vṛddhatrayī* 332).
vajrākṣāra (*Bhāratabhaiṣajyaratnākara*, Nr. 6588; *Rasaratnasamuccaya* 19.24–29;
Rasendrasārasaṃgraha, plīharoga 80–83; *Yogarātnākara* 524).

PINGALĀYOGINĪ
nirguṇḍīkalpa (*Bhaiṣajyaratnāvalī*, rasāyana 54).

PRAJĀPATI¹⁷
mahārāśnādikvātha (*Bhaiṣajyaratnāvalī*, āmavāta 28–35; *Bhāvaprakāśa*, cikitsā
26.132–142).

PURANDARA
bhārṅgīharītakya valeha (*Yogarātnākara* 372).

PUREŚĀNA
āmavātārivaṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 398; *Dhanvantari*, āmavāta 28).

PŪRṆĀMṚTĀKHYAYOGĪNDRA
jayasundarasa (*Rasaratnasamuccaya* 22.5–14).

RASARĀJA
rogatrayārīrasa (*Sahasrayoga* 237).

RATINĀTHA

pramehamihirataila (*Bhaiṣajyaratnāvalī*, prameha 228–236;
Bhāratabhaiṣajyaratnākara, Nr. 4136; *Bhṛṣajasamhitā* 12, Nr. 43).

RUDRA

candraprabhāvartī (*Bhāratabhaiṣajyaratnākara*, Nr. 1856; *Bhāvaprakāśa*, cikitsā 63.228–230; *Yogarātnākara* 813).
 cūrṇarāja (HIM I, 40 and 58; *Vṛddhatrayī* 330).
 grahaṇīśārdūlarasa (*Bhaiṣajyaratnāvalī*, grahaṇī 281–285; *Bhāratabhaiṣajyaratnākara*, Nr. 1613; *Rasayogasāgara*, kakārādi 547; *Rasendrasārasaṃgraha*, grahaṇī 43–47).
 jvarāṅkuśarasa (*Rasayogasāgara*, cakārādi 266).
 kinnarakaṇṭharasa (*Rasayogasāgara*, kakārādi 265).
 putrapradarasa (*Rasasaṃketakalikā* 4.108–118; *Rasayogasāgara*, pakārādi 192).
 rudrataila (*Bhaiṣajyaratnāvalī*, kuṣṭha 328–335; *Bhāratabhaiṣajyaratnākara*, Nr. 5964).
 śaṃkaraloha (*Rasayogasāgara*, śakārādi 5).
 sarvavyādhīhara (*Vṛddhatrayī* 332).
 śītabhañjīrasa (*Rasakāmadhenu* IV.1.648–653; *Rasasaṃketakalikā* 4.2–7).
 upadaṇṣebhasiṃharasa (*Rasakāmadhenu* IV.45.17–21).
 vāsārudrataila (*Bhāratabhaiṣajyaratnākara*, Nr. 6790).
 vijayā guṭikā (*Bhāratabhaiṣajyaratnākara*, Nrs. 7025, 7026; *Gadanigraha* I, guṭikā 461–472; *Rasakāmadhenu* IV.49.14–16).
 vijayādiguṭikā (Harṣakīrti's *Yogacintāmaṇi* 119–121).

SAHASRAKARAPUTRABHIṢAGVARAS

bhāṛṅgīharītakavyaleha (*Yogarātnākara* 372).

ŚAILENDRATANAYĀ

śailendrarasa (*Vaidyacintāmaṇi* 457).

ŚAIVEŚVARA

a bṛhatkaraṇa (Bower MS II.782).

ŚAKRA

jātiphalādyacūrṇa (*Rasaratnadīpikā* 159).

ŚAMBHU

ānandabhairavarasa (*Rasayogasāgara*, akārādi 300).
 ardhanārīṇaśeśvararasa (*Rasayogasāgara*, akārādi 239 and 241).
 ardhanārīśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8920; *Rasendrasārasaṃgraha*, jvara 219–221; *Vaidyacintāmaṇi* 42).
 atisārakuṭhāra (*Rasayogasāgara*, akārādi 107).
 bastyāmayāntakacūrṇa (*Rasayogasāgara*, pakārādi 362; *Vaidyacintāmaṇi* 303).

- bhairavaguggulu (*Rasayogasāgara*, pakārādi 452).
 bhasmeśvaranasya (*Vaidyacintāmaṇi* 74).
 bhasmeśvararasa (Cat. Madras Nr. 13225; *Vaidyayogasamgraha*).
 bolabaddharasa (*Rasakāmadhenu* IV.15.65–69).
 br̥hatsahacarataila (*Bhāratabhaiṣajyaratnākara*, Nr. 7983; *Gadanigraha* I, taila 433–436).
 br̥hatsarvajvaraharalauha (*Rasaratnadīpikā* 92–93).
 candraprabhā guṭikā (HIM I, 40 and 58–59).
 dhanvantarirasa (*Rasaratnasamuccaya* 20.131–133; *Rasayogasāgara*, takārādi 337).
 drutisārara (*Bhāratabhaiṣajyaratnākara*, Nr. 3219).
 gandhakatailapātana (HIM I, 40 and 77).
 kanakasundararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 947; *Rasaratnasamuccaya* 20.49–51; taught by Śambhu to Kubera; *Rasayogasāgara*, kakārādi 18).
 lokanātharasa (*Basavarājīya* 78–79; *Rasayogasāgara*, yakārādi 264).
 lokeśvararasa (*Bṛhadhyogatarāṅgiṇī* 76.140–142; *Dhanvantari*, rājayakṣman 35; *Rasayogasāgara*, yakārādi 275; *Rasendracintāmaṇi* 143–144; *Vaidyacintāmaṇi* 66; *Yogaratanākara* 336).
 mahācandrakalārara (*Bṛhadhyogatarāṅgiṇī* 100.43–49ab).
 mahājvarāṅkuśarasa (*Rasaratnasamuccaya* 12.39–41).
 mahākalyāṇakaghr̥ta (*Bhāratabhaiṣajyaratnākara*, Nr. 5230).
 mahāmṛtyuñjayalauha (*Bhaiṣajyaratnāvalī*, plīhayakṛt 136–145).
 mahānīlakaṇṭharasa (*Bṛhadrasarājasundara* 549; *Rasayogasāgara*, takārādi 456).
 mahārājjanṇpativallabharasa (*Bhaiṣajyaratnāvalī*, grahaṇī 381–386; *Bhāratabhaiṣajyaratnākara*, Nr. 5565; *Rasayogasāgara*, takārādi 460; *Rasendrasārasamgraha*, grahaṇī 156–161).
 mahāśaṅkhadrāvaka (*Bhaiṣajyaratnāvalī*, plīhayakṛt 180–193).
 mahāviṣamārīrara (*Bhāratabhaiṣajyaratnākara*, Nr. 5577; *Rasakāmadhenu* IV.1.639–647).
 nālikerāsava (*Bhāratabhaiṣajyaratnākara*, Nr. 3525; *Gadanigraha* I, āsava 286–291 ab).
 navāyasarasāyana (*Rasayogasāgara*, takārādi 376).
 nīlakaṇṭharasa (*Basavarājīya* 147; *Bhāratabhaiṣajyaratnākara*, Nr. 3663; *Vaidyacintāmaṇi* 255).
 nityodayarasa (*Rasaratnadīpikā* 251–252).
 pāṇi jaḍḍukarasa (*Rasayogasāgara*, pakārādi 95).
 phaṇibhūṣaṇarasa (*Rasayogasāgara*, pakārādi 341; *Vaidyacintāmaṇi* 68).
 pramehadhvāntavivasvān rasaḥ (*Rasayogasāgara*, pakārādi 272).
 prāṇapradā parpaṭī (*Bṛhadhyogatarāṅgiṇī* 76.138–139; *Yogaratanākara* 337).
 rasendrara (*Rasayogasāgara*, yakārādi 144; *Vaidyacintāmaṇi* 41–42).
 śambhunātharasa (*Rasaratnadīpikā* 51).
 śaṅkhodararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 7564; *Rasakāmadhenu* IV.32.137–148).
 sarvāṅgasundararasa (*Vaidyacintāmaṇi* 457).
 sarvasiddhāñjana (*Kāmaratna* 13.15–16).

saubhāgyaśuñṭhī (*Rasaratnasamuccaya* 22.116–120).
 sūcīkābharaṇarasa (*Rasaratnasamuccaya* 12.70–89; *Rasayogasāgara*, śakārādi 472).
 sūryaprabhā guṭikā (*Vaidyacintāmaṇi* 190).
 sūryaprabhā vaṭi (*Bṛhadrasarājasundara* 455–456).
 trailokyatilakarasa (*Rasaratnasamuccaya* 15.66–80).
 trimūrtirasa (*Vaidyacintāmaṇi* 43).
 tripurāntakarasa (*Rasayogasāgara*, takārādi 210; *Vaidyacintāmaṇi* 39).
 upadañśagajakesarirasa (*Bṛhadyogatarāṅgiṇī* 117.27–31).
 upadañśebhaṣiṇharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 536).
 vātāṅkuśarasa (*Vaidyacintāmaṇi* 193).
 vātaviṣphoṭaharasa (*Rasayogasāgara*, yakārādi 472).
 viśama jvaraharalauha (*Rasaratnadīpikā* 90).
 viśamārīrasa (*Rasayogasāgara*, yakārādi 562).
 viśvoddīpakābhra (*Bhaiṣajyaratnāvalī*, agnimāndyādi 221–224;
Bhāratabhaiṣajyaratnākara, Nr. 7071).
 vyoṣādyā guṭikā (*Gadanigraha* I, guṭikā 299–302).
 vyoṣādyaguṭikāguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 6696).

ŚAMBHUNĀTHA

rasakandarparasa (*Rasayogasāgara*, yakārādi 60).

ŚAMKARA

ajīrṇakaṇṭhakarasa (*Rasakāmadhenu* IV.13.32–34).
 ardhānārīṇaśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 332).
 daivavyapāśrayacikitsā (*Rasaratnasamuccaya* 22.60–69).
 kalpatarurasa (*Bhāratabhaiṣajyaratnākara*, Nr. 968; *Rasayogasāgara*, kakārādi 106).
 lakṣmīvilāsarasa (*Rasayogasāgara*, yakārādi 234; *Rasakāmadhenu* IV.1.715–721).
 mahāśatāvartaila (*Vaidyacintāmaṇi* 239).
 mṛtasaṇḍjīvanarasa (*Rasendrasārasaṅgraha*, jvara 156–160).
 nityoditarasa (*Bṛhadrasarājasundara* 359; *Rasakāmadhenu* IV.48.65–67;
Rasendracintāmaṇi 125–126).
 pañcānanavaṭi (*Rasendrasārasaṅgraha*, arśas 28–30).
 pārādadruti (*Bhāratabhaiṣajyaratnākara*, Nr. 4334; *Rasakāmadhenu* IV.22.72–80).
 pāśupatāstrarasa (*Rasayogasāgara*, pakārādi 146; *Vaidyacintāmaṇi* 66).
 pittabhañjanarasa (*Vaidyacintāmaṇi* 234).
 pūrṇacandrarasa (HIM I, 40 and 79: from *Samkṣiptasāra*).
 rākṣasarasa (*Rasaratnasamuccaya* 16.147–148).
 śaṅkaralauha (*Bhāvaprakāśa*, cikitsā 5.96–98).
 śaṅkaraloha (Vaṅgasena, arśas 263–302).
 śaṅkaramataloha (*Rasakāmadhenu* IV.48.109–131).
 śaṅkarataila (Vṛddhatrayī 331).
 śaṅkaravaṭi (*Bhaiṣajyaratnāvalī*, hṛdroga 52–56; *Bhāratabhaiṣajyaratnākara*, Nr. 7527; *Rasayogasāgara*, śakārādi 9).
 śaṅkari jvarāṅkuśarasa (*Bṛhadrasarājasundara* 299).

saṃśoṣaṇarasa (*Rasakaumudī* 4.118cd–124; *Rasayogasāgara*, śakārādi 565).
 śārikhadrāva (Vaṅgasena, udara 176–178).
 siddhaharītālabbhasman (*Bheṣajasaṃhitā* 5, Nr. 65).
 śūlebhasimhinīguṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 7667; *Rasakāmadhenu*
 IV.21.52–56; *Rasayogasāgara*, śakārādi 181).
 tālaleśvararasa (*Rasayogasāgara*, takārādi 129).
 vātārīkuṣarasa (*Vaidyacintāmaṇi* 193).

SAMTOṢANĀTHA

saṃnipātabhairavarasa (*Rasakāmadhenu* IV.1.367–368).

ṢAṆMUKHA

ṣaṇmukharasa (*Rasakaumudī* 4.27–33ab).

SARASVATĪ¹⁸

brāhmīghṛta (*Sahasrayoga* 70).
 sārasvataghṛta (*Gadanigraha* I, ghṛta 136–141).

ŚAŚĪSEKHARA

lakṣmīvilāsarasa (*Rasayogasāgara*, yakārādi 242).

SIDDHA

nāgeśvararasa (*Rasayogasāgara*, takārādi 421).
 phaṇipatirasa (*Vaidyacintāmaṇi* 194).

SIDDHANĀTHA

lokanāyakarasa (*Rasakāmadhenu* IV.15.32–38).

SIMHAGUPTA

khadirādivatī (*Bhāratabhaiṣajyaratnākara*, Nr. 1069; *Gadanigraha* I, guṭikā 457–459;
Rasayogasāgara, kakārādi 360).

SIMHANA

siṃhaṇacūrṇa (*Gadanigraha* I, cūrṇa 394).

ŚIVA¹⁹

agnidīpanarasa (*Rasaratnādīpikā* 197).
 anaṅgamekhalāmodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 107; *Bṛhadhyogatarāṅgiṇī*
 147.419–425).
 bālakumārarasa (*Rasaratnādīpikā* 418).
 bālarasa (*Bhaiṣajyaratnāvalī*, bālaroga 127–131; *Bṛhadrasarājasundara* 535;
Rasendrasārasaṃgraha, bālaroga 1–5).
 bālayakṛdariloha (*Bhāratabhaiṣajyaratnākara*, Nr. 4742; *Rasayogasāgara*, pakārādi
 371).

- bhūtabhairavarasa (Tōḍara III: 4.1001–1003).
 bṛhaccūḍāmaṇirasa (*Bhāratabhaiṣajyaratnākara*, Nr. 1940; *Rasayogasāgara*, cakārādi 140; *Rasendrasārasaṃgraha*, jvara 360–365).
 bṛhajjivarabhairavataila (*Bhaiṣajyaratnāvalī*, jvara 1372–1378).
 bṛhatsarvajvaraharaloḥa (*Bṛhadrasarājasundara* 316).
 cūḍāmaṇirasa (*Bhaiṣajyaratnāvalī*, jvara 981–986 and 987–992;
Bhāratabhaiṣajyaratnākara, Nr. 1938; *Rasayogasāgara*, cakārādi 138;
Rasendrasārasaṃgraha, jvara 351–356).
 culukabhedarasa (Tōḍara VI: 12.135–141).
 grahaṇīkapāṭarasa (*Rasayogasāgara*, kakārādi 521).
 haridrādiyoga (*Yogaratanākara* 541).
 jayamaṅgalarasa (*Bhaiṣajyaratnāvalī*, jvara 1061–1069; *Bhāratabhaiṣajyaratnākara*, Nr. 2103; *Bṛhadrasarājasundara* 309; *Dhanvantari*, jvara 109; *Rasayogasāgara*, cakārādi 158).
 jvarāṇkuṣarasa (Tōḍara III: 4.956–962).
 kālārirasa (Tōḍara VI: 12.142–144).
 lakṣmīnārāyaṇarasa (*Rasayogasāgara*, yakārādi 229).
 lokanātheśvararasa (Tōḍara IV: 8.157–159).
 mahādrāvaka (*Rasaratnadīpikā* 356–357).
 mahāgrahaṇīkapāṭarasa (*Rasendrasārasaṃgraha*, grahaṇī 95–97).
 makaradhvaḥja (*Rasendrasārasaṃgraha*, rasāyana 75–77).
 makaradhvajarasa (*Bṛhadrasarājasundara* 541; *Rasayogasāgara*, pakārādi 469).
 makaradhvajarasāyana (*Bhaiṣajyaratnāvalī*, rasāyana 75–77;
Bhāratabhaiṣajyaratnākara, Nr. 5467).
 mṛtyuñjayarasa (*Dhanvantari*, jvara 136).
 mūrchāntakarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 5624).
 nāgodararasa (Tōḍara III: 4.8–9).
 punarnavāditaila (*Vaidyacintāmaṇi* 433).
 rāmarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 6150).
 rasabhasmayoga (*Yogaratanākara* 922–923).
 rasasindūra (*Rasayogasāgara*, yakārādi 117).
 rasendramaṅgalarasa (*Rasakāmadhenu* IV.40.84–95).
 recipes against pārśvaśūla (Tōḍara V: 11.786–789).
 sarvatobhadrarasa (*Bhaiṣajyaratnāvalī*, jvara 1126–1134; *Rasayogasāgara*, śakārādi 317; *Rasendrasārasaṃgraha*, jvara 331–339).
 saubhāgyaśuṇṭhī (*Pākapradīpa* 33–39).
 śivāgada (A.s.U.40.87).
 śivāgutikā (*Bhaiṣajyaratnāvalī*, rasāyana 151–175).
 śivātāila (*Rasaratnadīpikā* 268–269).
 śṛṅgaveravaṭī (*Rasaratnadīpikā* 43).
 śulbasundararasa (*Vaidyacintāmaṇi* 324).
 tālakeśvararasa (*Rasayogasāgara*, takārādi 96).
 trimūrtirasa (Tōḍara VI: 12.120–145).
 vajrakṣāra (Tōḍara VI: 12.72–77).

vāmanīyarasa (Ṭoḍara VI: 12.120–134).
yogarāja (Ṭoḍara III: 4.1099–1102).

ŚIVĀ
śivātāila (*Bhaiṣajyaratnāvalī*, unmāda 93–100).

SOMADEVA
vātavisphoṭāhararasa (*Rasayogasāgara*, yakārādi 472).

SOMANĀTHA
tāmraḥasman (*Rasaratnasamuccaya* 5.58–61; *Rasendracūḍāmaṇi* 14.70).

SOMA YATI
kumudapraḥśa (*Rasayogasāgara*, kakārādi 278).

ŚRĪGIRIŚA
kāntarasāyana (*Rasayogasāgara*, kakārādi 142).

ŚRĪNĀTHA
tīkṣṇamukharasa (*Rasayogasāgara*, takārādi 167).

ŚRĪVATSĀNKA
rasaparpatī (*Bṛhadrasarājasundara* 337–338).
rasaparpatikā (*Bhaiṣajyaratnāvalī*, grahaṇī 402–441).

SUKAVI
laśunapāka (*Rasayogasāgara*, yakārādi 220).

ŚUKRA
daśāṅgadhūpa (Candraṭa ad *Cikitsākalikā* 375).
mṛtasaṃjīvanī surā (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 372–386).

ŚŪLAPĀṆI
kumārīyāsava (*Bhāratabhaiṣajyaratnākara*, Nr. 894; *Gadanigraha* I, āsava 1–15ab).
dadhivatī (*Rasaratnadīpikā* 60–61).
pūṃcandrodayasindūra (*Basavarājīya* 133; *Rasayogasāgara*, pakārādi 214).

SURENDRA
daśamūlyādyatāila (*Gadanigraha* I, tāila 412–421).

SŪRYA ^{2●}
kṣudhāsāgararasa (*Bhaiṣajyaratnāvalī*, agnimāndyādi 100–101;
Bhāratabhaiṣajyaratnākara, Nr. 8753; *Dhanvantari*, agnimāndya 24).
kṣudhāsāgaravaṭī (*Vaidyacintāmaṇi* 407).

sūryakrāntarasa (*Vaidyacintāmaṇi* 457).

SŪRYADĀŚA

sarvadīpakaraṇarasa (*Rasayogasāgara*, śākārādi 322).

SVASAMVEDYA

kanakasundararasa (*Rasayogasāgara*, kakārādi 27).

SVAYAMBHŪ

sahacarataila (Bower MS II.329–336).

saṃjīvanāgada (A.s.U.40.59–67).

svāyaṃbhuvaguggulu (*Gadani-graha* I, guṭikā 303–307ab; *Rasayogasāgara*, śākārādi 601).

vajrakṣāra (*Bhāvaprakāśa*, cikitsā 32.35–41).

TANTRANĀTHA

bhāskararasa (*Rasayogasāgara*, pakārādi 428).

TĀRĀ²¹

tārāmaṇḍūra (*Rasakāmadhenu* IV.21.162–164; *Rasaratnākara* II, pariṇāmasūla 28–33; *Rasayogasāgara*, takārādi 60; *Vaidyacintāmaṇi* 329).

tārāmaṇḍūraguḍa (*Bhaiṣajyaratnāvalī*, śūla 181–187; Vaṅgasena, pariṇāmasūla 63–68).

tārāmaṇḍūravāṭaka (*Bṛhad-yogatarāṅgiṇī* 95.50–54ab).

vaḍavāmukhī guṭikā (*Rasaratnasamuccaya* 16.127–128).

TRAILOKYANĀTHA

siddhamakaradhvaṇja (*Bhaiṣajyaratnāvalī*, rasāyana 110–130).

TRINETRA

triṅṇākhyarasa (*Vaidyacintāmaṇi* 194).

TRIPURĀ

tripurāntakarasa (*Rasaratnasamuccaya* 20.53–55; *Rasayogasāgara*, takārādi 211).

TRIPURĀNTAKA

aṣṭāṅgarasa (*Bhaiṣajyaratnāvalī*, arśas 260–261; *Rasayogasāgara*, akārādi 277; *Rasendrasārasaṃgraha*, arśas 31–32).

TRIVIKRAMA

trivikramarasa (*Vaidyacintāmaṇi* 200).

TRYAMBAKA

mahāgandhahastyagada (Ca.Ci.23.77–94: taught by Tryambaka to Vaiśravaṇa).

VAIDYAKUMĀRAKAS

romavedharasa (*Rasakāmadhenu* IV.1.261–263).

VAIDYANĀTHA

pratāpalaṅkeśvararasa (*Bṛhadrasarājasundara* 320; *Rasaratnasamuccaya* 12.111–114;

Rasayogasāgara, pakārādi 236).

a recipe against śvitra (Tōḍara VII: 5.144).

śrīkāmeśvaramodaka (*Rasaratnākara* II, grahaṇī 27–33; *Rasendracintāmaṇi* 90–91).

śrīvaidyanāthavaṭī (*Rasendrasārasaṃgraha*, grahaṇī 48–53).

śrīvaidyanāthavaṭikā (*Bṛhadrasarājasundara* 351).

vaidyanāthavaṭikā (*Bhaiṣajyaratnāvalī*, grahaṇī 301–307; *Dhanvantari*, grahaṇī 16).

vaidyanāthavaṭī (*Bhaiṣajyaratnāvalī*, udāvartānāha 46–48 and śoṭha 85–94;

Bhāratabhaiṣajyaratnākara, Nrs. 7129–7132; *Dhanvantari*, udāvarta 11, śoṭha 26;

Rasayogasāgara, yakārādi 615 and 616; *Rasendrasārasaṃgraha*, udāvartānāha 1–2).

VAIŚVĀNARA

vaḍavānalavaṭī (*Rasakāmadhenu* IV.13.632–69; *Rasayogasāgara*, yakārādi 415).

VAJRAPĀṆĪ²²

VARUṆA²³

nimbāriṣṭa (A.s.Ci.21.29–31).

VĀSAVA

vāsākūṣmāṇḍalehya (*Vaidyacintāmaṇi* 259).

VASU

bṛhallavaṅgādivaṭī (*Bhaiṣajyaratnāvalī*, agnimāndyādi 103–106;

Rasendrasārasaṃgraha, ajīrṇa 75–78).

VĀSUDEVA

bṛhacchatāvarīmodaka (*Rasaratnāḍīpikā* 138–139).

caṇḍasaṃgrahagadaikakapāṭarasa (*Bṛhadrasarājasundara* 344; *Rasaratnasamuccaya* 16.54–56).

mahālākṣmīvilāsarasa (*Bhaiṣajyaratnāvalī*, rasāyana 89–101).

pramehadhīvāntavivasvān rasali (*Rasayogasāgara*, pakārādi 272).

rasacandrikāvaṭī (*Bhaiṣajyaratnāvalī*, śīroroga 63–67; *Bhāratabhaiṣajyaratnākara*,

Nr. 6061; *Bṛhadrasarājasundara* 528; *Rasayogasāgara*, yakārādi 67;

Rasendrasārasaṃgraha, śīroroga 1–5).

śatāvarīmodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 7569; *Dhanvantari*, vājīkaraṇa 9;

Rasaratnākara II, vājīkaraṇa 48–60; *Rasayogasāgara*, śakārādi 57).

svalpaśatāvarīmodaka (*Rasaratnāḍīpikā* 137–138).

VĀSUDEVA MUNI

arkeśa (*Rasaratnasamuccaya* 15.62–63).

VIDHI

āmavātagajasiṃhamodaka (*Rasendrasārasaṃgraha*, āmavāta 21–26).

VINDHYAVĀSIPĀDA

śivāghṛta (*Bhaiṣajyaratnāvalī*, unmāda 81–92).

VIṢṆU²⁴

āmavāteśvararasa (*Bhaiṣajyaratnāvalī*, āmavāta 73–82; *Dhanvantari*, āmavāta 25 and 30; *Rasendrasārasaṃgraha*, āmavāta 9–15).

aśokaghṛta (*Bhaiṣajyaratnāvalī*, pradara 103–109; *Bhāratabhaiṣajyaratnākara*, Nr. 171; *Rasaratnākara* II, pradara 35–41; Vaṅgasena, strīroga 57–63).

bālanārāyaṇataila (Niścala ad *Cakradatta*, vātavyādhi 96–105).

bṛhacchṛṅgārābhra (*Bhaiṣajyaratnāvalī*, kāsa 139–145; *Bṛhadrasarājasundara* 421 and 549; *Dhanvantari*, kāsa 30; *Rasendrasārasaṃgraha*, kāsa 93–100 and rasāyana 100–106).

bṛhatkirātādyataila (*Rasaratnadīpikā* 96–97).

dinārdharasa (*Rasayogasāgara*, takārādi 311).

himasāgarataila (*Bhaiṣajyaratnāvalī*, vātavyādhi 516–527; *Bheṣajasaṃhitā* 12, Nr. 75; *Dhanvantari*, vātavyādhi 69).

kadalyādighṛta (*Dhanvantari*, somaroga 5).

kadalyādyaghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 824).

kāntavallabharasa (*Rasayogasāgara*, kakārādi 145; *Vaidyacintāmaṇi* 94).

madhyamaviṣṇutaila (*Bhaiṣajyaratnāvalī*, vātavyādhi 315–324; *Dhanvantari*, vātavyādhi 63).

madhyānārāyaṇataila (Ṭoḍara V: 11.624–635).

mahājvarāṅkuśarasa (*Vaidyacintāmaṇi* 44).

mahānārāyaṇataila (*Dhanvantari*, vātavyādhi 67).

mahāviṣṇutaila (*Rasaratnadīpikā* 276–277).

navajvaraharī vaṭikā (*Rasapaddhati* 160).

nityodararasa (*Dhanvantari*, kāsa 31; *Rasendrasārasaṃgraha*, yakṣman 100–107).

pañcāmṛtarasa (*Dhanvantari*, rasāyana 4; *Rasaratnākara* II, rasāyana 32–40).

sarvāṅgasundararasa (*Dhanvantari*, śūla 55; *Rasendrasārasaṃgraha*, śūla 41–45).

śātāvarītāila (*Bhāratabhaiṣajyaratnākara*, Nr. 7401; *Gadanigraha* I, taila 73–78).

śṛṅgārābhra (*Rasayogasāgara*, śakārādi 185).

svalpaviṣṇutaila (*Bhaiṣajyaratnāvalī*, vātavyādhi 307–314).

viṣṇuparākramarasa (*Rasayogasāgara*, yakārādi 567; *Vaidyacintāmaṇi* 199).

viṣṇutaila (*Bhāratabhaiṣajyaratnākara*, Nr. 6810; *Bheṣajasaṃhitā* 12, Nr. 66;

Bṛhadyogatarāṅgiṇī 90.245–251; *Cakradatta*, vātavyādhi 113–120; *Dhanvantari*, unmāda 30; Ṭoḍara V: 14.45–52).

viśvambhararasa (*Rasayogasāgara*, yakārādi 542; *Vaidyacintāmaṇi* 42, 70).

VIṢṢUNĀTHA

bṛhajjīrakādimodaka (*Rasaratnadīpikā* 143–144).

VIŚVANĀTHA

mahāmṛtyuñjayarasa (*Rasaratnadīpikā* 355–356).

viśveśvararasa (*Bhaiṣajyaratnāvalī*, vātarakta 48–53; *Bhāratabhaiṣajyaratnākara*, Nr.

7066; *Dhanvantari*, vātarakta 24; *Rasendrasārasaṅgraha*, vātarakta 17–22).

VĪTIHOTRA

saṃnipātādāvānalarasa (*Rasayogasāgara*, śakārādi 261).

VIṢKODARA

a rasālā (*Napūṃsakāmṛtārṇava* 2.57–58).

VRṢADHVAJA

saṃśamanayoga (*Dhanvantari*, atisāra 32).

vrṣadhvajarasa (*Bhaiṣajyaratnāvalī*, chardi 24–27).

VRṢṢINĀTHA

jīrakādimodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 202–212; *Bhāratabhaiṣajyaratnākara*,

Nr. 2020; *Rasayogasāgara*, cakārādi 187).

VYĀSA²⁵

abhrādi-parpaṭī (*Rasaratnadīpikā* 180).

gaṇḍīrāriṣṭa (*Gadanigraha* I, āsava 342–353).

pramehamihirataila (*Rasaratnadīpikā* 341).

YOGASIDDHA

kāmācāramaṇḍūra (*Rasaratnadīpikā* 169).

YOGIN

candraprabhā vaṭī (*Rasakāmadhenu* IV.15.75–77).

YOGINĪ

svaḥpanāyikācūrṇa (*Rasaratnadīpikā* 121).

Appendix 2

References to medicine in non-medical literature

General books and articles: Atrideva Vidyāṅkārā (1956). S.C. Banerji (1980). K.N. Dave (1985). S.L. Hora (1948a), (1951a). K.C. Jayaram (1950). Om Prakash (1961), (1987). K.S. Ramamurti (1971). B. Rama Rao (1986). H.S. Rao (1957). R. Syed (1990). G.U. Thite (1982). Vibhādevī (1979a), (1979b).

ĀDITYAYĀMALA ¹

S.C. Banerji (1992): 188–189, 210.

ĀDIYĀMALA

S.C. Banerji (1992): 217, 239, 256.

AGHORATANTRA ²

S.C. Banerji (1992): 205–206.

AMARAKOṢA

A.K. Biswas and S. Biswas (1996): 137. V. Dvivedī (1966): 248–253. B. Seal (1985): 171–172. P.V. Sharma (1972d): 242–247, (1979a), (1979d). *S. Sundara Rajan (1977). R.T. Vyas (1989): 63–66.

AṄGAVIJJĀ

A.K. Biswas and S. Biswas (1996): 135–136.

ARTHAŚĀSTRA

ABI 127–137. S. Ārya (1984): 24–26. R. Bhaṭnāgar (1988). A.K. Biswas and S. Biswas (1996): 39–56 and 235–241. D.K. Chakrabarti (1992): 106–109. A. Chattopadhyaya (1967). M. Choudhury (1963). Gulabkunverba I, 359–363. S.L. Hora (1948), (1951a): 408–409. O.P. Jaggi IV, 49–51 and 194–198. J. Jolly (1914a). Jyotir Mitra (1970b), (1974): 26–37, (1992): 35. S.S. Kamavisdar (1980). D. Kothari (1979). R.F.G. Müller (1927), (1930d), (1934a): 84–86, (1942): 22–24. S.R.N. Murthy (1978), (1990): 14–21. Om Prakash (1961): 87–101, (1987): II, 164–182. P. Rāy (1956): 49–58. P. Ray (1967): 15. D.V.S. Reddy * (1944a), * (1945a), (1966): 1–60. A. Śarmā (1981). B.R. Śāstrī (1980). Satyaprakāś (1960): 269–300. H. Scharfe (1993): 252–261 and 276–292. P.V. Sharma (1979a), (1992a): 142–146. A.N. Sinha (1989). A.N. Singh and R.S. Singh (1983). R.P. Trivedī (1992). R. Varmā Veṇu (1979). R.T. Vyas (1989): 30. M. Winternitz (1977): 100–101. J. Yādava and Jyotirmitra Ācārya (1979).

AŚVAGHOṢA

Atrideva (1956): 32–50. Jyotir Mitra (1974): 50–56 and 136–140. P.V. Sharma (1970a): 43–46, (1992a): 124. Ś. Vidyālaṅkāra (1980).

AŚVINĪTANTRA

S.C. Banerji (1992): 189, 197, 198, 199, 202, 203, 209.

ATHARVAVEDA

ABI 31–63. Atrideva (1978): 186–188. AVI 38–41. L.C. Barret (1933). V.V. Bhide (1981). M. Bloomfield (1886), (1890), (1987): 441–444. D. Chattopadhyaya (1979): 306–314. T. Chowdhury (1931). S. Dasgupta (1975): II, 273–301. DGV IV, 202–205. K.D. Dvivedi (1999). J. Gonda (1965): 157–158. J.V. Grohmann (1865). J.R. Haldar (1977): 12–18. A.F.R. Hoernle (1978): 109–114 and 242. S.L. Hora (1952). W.A. Jayne (1925): 151–152. J.C. Joṣī, M.G. Pāṇḍeya and J. Pāṇḍeya (1993). V.W. Karambelkar (1961). R.R. Kashyap (1935/36). A. Kuhn (1864). S. Mahdihassan (1980a). W.W. Malandra (1979). G.N. Mukerjee (1927a), (1928). R.F.G. Müller (1930b), (1934a), (1935d), (1937), (1955), (1956b), (1958b), (1964). A. Narayana (1995). H.Ch. Patyal (1968/69), (1977). A. Pictet (1856). H.G. Ranade (1981). M. Roy (1966), (1970). T. Śarmā (1981/82): 14–16. B. Schlerath (1962). P.V. Sharma (1979a). N.J. Shende (1985). H.G. Singh (1977): 15–82, (1980). G.U. Thite (1982). K.G. Zysk (1985).

AVADĀNAŚATAKA

P.V. Sharma (1992a): 120.

BALLĀLA – BHOJAPRABANDHA

R.F.G. Müller (1959).

BALLĀLASENA – DĀNASĀGARA

A.F.R. Hoernle (1978): 42.

BĀṆA

ABI 249. Atrideva (1956): 96–102. D.V.S. Reddy *(1944c), *(1945b), *(1946a), (1946b), *(1948), *(1950a). P.V. Sharma (1972d), (1975b), (1979a), (1992a): 146–149. S.R. Sarma and Y. Sahai (1995): 151. V. Venkatachalam (1975).

BHĀGAVATAPURĀṆA

Ś. Śarmā (1997). P.V. Sharma (1979a), (1992a): 99. D. Śukla (1993).

BHĀRATANĀṬYAŚĀSTRA

R.K. Sen (1954), (1966).

BHĀRAVI

Atrideva (1956): 74–75. J.P. Thaker (1972).

BHĀSA

Atrideva (1956): 28–31. D.V.S. Reddy (1944b).

BHĀSKARAKAṆṬHA – CITTĀNUBODHAŚĀSTRA

W. Slaje (1993).

BHAVABHŪTI

Atrideva (1956): 103–106. P.V. Sharma (1979a).

BHOJA – SAMARĀṄGAṆA-SŪTRADHĀRA

Mira Roy (1984).

BĪJACINTĀMAṆITANTRA³

S.C. Banerji (1992): 175–176, 186, 217, 219, 226, 238, 244, 244–245.

BRĀHMAṆAS

ABI 63–69. AVI 41–42. DGV IV, 205–206. P.E. Dumont (1957). J.R. Haldar (1977): 18–19. S. Jain (1981). R.F.G. Müller (1935d). R.S.S. Murthy (1970). H. Oertel (1897). T. Śarmā (1981/82): 22–23. P.V. Sharma (1979a), (1992a): 26–27. P.V. Tewari (1992a): 72–73.

BRAHMAPURĀṆA

P. Sensarma (1989): 97–102. P.V. Sharma (1992a): 93–94.

BRAHMAVAIVARTAPURĀṆA

Anonymous (1965b): 209. N. Gangadharan (1997). P. Sensarma (1989): 55–68. P.V. Sharma (1992a): 100. Vṛddhatrayī 6–7.

BRHADĀRAṆYAKOPANIṢAD

S. Mahdihassan (1953). Mira Roy (1966). A. Singh and L.V. Guru (1981).

BUDDHIST LITERATURE

ABI 91–110. Atrideva Vidyālaṅkāra (1978): 225–232. A.K. Bagchi (1997): 38–39. P.V. Bapat (1933/34), (1963). S. Beal (1884): I, 78–79 and 88. N.K. Bhattasali (1929): 63–65. R. Birnbaum (1989). K. Butzenberger and M. Fedorova (1989). D.K. Chakrabarti (1992): 112–115. B.M. Chintamani and B.V. Subbarayappa (1971). P. Demiéville and J. Filliozat (1937). V. Deshpande (1987). E.T. Fenner (1983). Ph. Granoff (1998a). M. Hahn (1997). J.R. Haldar (1977). O.P. Jaggi IV, 51–58. J. Jaworski (1927), (1929/30). K.C. Jayaram (1950). Jyotir Mitra (1974): 3–21 and 73–140, (1974b), (1975), (1977), (1978), (1978b), (1985), (1992): 34–35, (1999). S.S. Kamaviśdar (1980). B.C. Law * (1940), (1945/46). Liacre-de Saint-Firmin (1916). J. Liyanaratne (1994), (1996). R.C. Majumdar (1971): 220–222. H. Nakamura (1989). Om Prakash (1961): 58–86, (1987): II, 125–163. C. Patra (1996): 75–106. D.V.S.

Reddy (1956). K.E. Rehm (1969). Samdhong Rinpoche (1974). T. Śarmā (1981/82): 31–34. D.N. Sen (1897). P.V. Sharma (1992a): 117–128. R.S. Singh (1979). O. Stein (1933). M.V. Talim (1967). M. Tatz (1985). I. Veith and A. Minami (1966). A. Waley (1930/32). M.G. Weiss (1977): 16. Yashpal (1949). L. Zwilling (1989). K.G. Zysk (1988), (1991), (1997).

CŪḲAVAMSA

A. Senadhira (1995): 4–7.

ḌĀMARATANTRA⁴

S.C. Banerji (1992): 188, 193, 194, 195, 198, 204, 207.

DAṆḌIN

Atrideva (1956): 89–95.

DHARMAŚĀSTRA

ABI 118–122. A.L. Basham (1976). S.C. Banerji (1955/56). B. Bhattacharya (1967). *A. Chattopadhyay (1968). S.L. Hora (1953). O.P. Jaggi IV, 48–49. Jyotir Mitra (1992): 37. R.F.G. Müller (1935a). Om Prakash (1961): 34–57, (1987): II, 95–125. B. Rama Rao (1982). S. Sengupta (1956). T. Śarmā (1976), (1981/82): 24. P.V. Sharma (1979a), (1992a): 29. L. Sternbach *(1945), (1948), (1949), (1965). P. Tivārī (1977). M.G. Weiss (1977): 24–32.

DHĀTRĪTANTRA

S.C. Banerji (1992): 200.

DHUNḌIRĀJA – GĪRVĀṆAPADAMAṆJARĪ

P.K. Gode (1945f).

DĪPAVAMSA

Jyotir Mitra (1992): 37–38. R.F.G. Müller (1930d). D.V.S. Reddy (1962), (1966): 78–81.

DIVYĀVADĀNA⁵

ABI 145–147, 168. R.P. Bhaṭnāgar (1978). Jyotir Mitra (1970b), (1974): 57–62. R.F.G. Müller (1934a): 89. P.V. Sharma (1968): 62–63, (1992a): 120–121. K. Upreti (1995).

GARUḌATANTRA

S.C. Banerji (1992): 229.

GĀRUḌĪTANTRA⁶

S.C. Banerji (1992): 177, 192, 203, 204–205, 226, 227, 230, 231, 233, 234, 235, 246, 247, 249, 253.

GRAMMATICAL LITERATURE

J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 426. Jyotir Mitra (1974): 38–39. Om Prakash (1961): 34–57 and 87–101, (1987): II, 95–125 and 164–182. P.V. Sharma (1977), (1979a), (1992a): 137–142.

GRHYASŪTRAS

V.M. Apte (1954): 95–102, 117–126, 150–154. J.R. Haldar (1977): 19. B.C. Lele (1927). R.F.G. Müller (1934a): 99, (1935d). Om Prakash (1961): 34–57, (1987): II, 95–125. P.V. Sharma (1979a), (1992a): 28–29.

HĀLA

Atrideva (1956): 73.

HEMACANDRA

H.M. Johnson (1936).

INDRAJĀLATANTRA⁷

S.C. Banerji (1992): 179, 181, 204.

INSCRIPTIONS

A. Chakravarti (1979). M. Chakravarti (1907). M.N. Deshpande (1971). J.M. de Figueiredo (1984). Gulabkunverba I, 303 and 306–307. G. Gurumurthy (1970). S.L. Hora (1950), (1951a): 409–410. P. Hymavathi (1993): 21–24, 43, 44, 46–48, 76, 79–80, 83–89, 144, 145, 146, 151, 153, 208, 217, 265, 269, 275–279, 287. Jyotir Mitra (1992): 38. K.H. Krishnamurthy and G. Chandra Mouli (1984): 47–48. R.F.G. Müller (1930d). K.R. Norman (1967). P.V. Parabrahma Sastry (1977). A.S. Ramanatha Ayyar (1937). B. Rama Rao (1975a), (1976a). D.V.S. Reddy (1940c), (1972b), (1972c). B.G.L. Swamy (1973).

ĪŚĀNAŚIVAGURUDEVAPADDHATI

S.C. Banerji (1988): 192.

PAṆḌITARĀYA JAGANNĀTHA

Atrideva (1956): 123–126.

JAIN LITERATURE

Atrideva (1961): 93–95. N. Balbir (1990), (1992). R. Bhaṭṇāgar (1984). C. Caillat (1974). D.K. Chakrabarti (1992): 115–116. Ph. Granoff (1998b). R. Guru (1983). Hariścandra (1978). D.C. Jain (1980). H. Jain (1978). J.C. Jain (1947). N.L. Jain (1996): 363–559. R. Jain (1978), (1981). S. Jain (1975). K.C. Jayaram (1950). Jyotir Mitra (1992): 36. H.R. Kapadia (1962), (1964). J.F. Kohl (1953a), (1953b), (1954), (1955). B.C. Law (1945/46). Om Prakash (1961): 58–86, (1987): II, 125–163. B. Seal (1985): 188–193. Madhu Sen (1975): 123–190, 331–337. P.V. Sharma (1992a): 128–131. J.C. Sikdar (1980).

JAMBHĀLĪTANTRA

S.C. Banerji (1992): 256.

JĀTAKAMĀLĀ

P.V. Sharma (1979a): 105 and 111, (1992a): 124.

JĀTAKAS

*B.K. Barua (1963). S.L. Hora (1955). S.L. Hora and S.K. Saraswati (1955). Jyotir Mitra (1985). R.F.G. Müller (1928a), (1930b): 191–192. D.V.S. Reddy (1939c), (1940a).

JAYAVALLABHA – VAJJĀLAGGA

B.M. Chintamani (1971): 171.

JÑĀNASAMKALINĪTANTRA⁸

S.C. Banerji (1988): 195–199.

JYOTIRĪŚVARA – PAÑCASĀYAKA

B. Dossi (1998): 107–108. R. Schmidt (1911): 579–658. L. Sternbach (1962). Vibhā Devī (1978a).

KĀLIDĀSA

M.V. Apte (1951). Atrideva (1956): 51–70. T. Chandrasekharan (1946). B. Deb (1955). C.S. Gupta (1963). H. Hensgen (1958). *H. Kimura (1969/70). *H. Kreyenborg (1921). S.C. Law (1924). G.R. Nandargikar (1971): Critical Notice 197–200. S.P. Narang (1976): 358–361. B. Rama Rao (1963). P.V. Sharma (1972d): 235–236, (1979a). M. Uniyāl (1975), (1976).

KĀLIKĀPURĀṆA

R.T. Vyas (1989): 46–48.

KĀLĪTANTRA⁹

S.C. Banerji (1988): 123–125 and 199–203.

KALPASŪTRAS

DGV IV, 207–212. P.V. Tewari (1992a): 76–78.

KALYĀṆAMALLA – ĀNAṆGARĀṆGA

R. Schmidt (1911): 578–656. L. Sternbach (1962).

KANNAḌA LITERATURE

K.T. Achaya (1994): 92–93, 118–123, 125–126.

KAPĀLATANTRA

S.C. Banerji (1992): 212.

KĀṬYĀYANA

DGV IV, 213–215. Jyotir Mitra (1974): 22–24. P.V. Sharma (1992a): 139–140.

KAUŚIKASŪTRA

J.R. Haldar (1977): 19. R.F.G. Müller (1930b). P.V. Sharma (1979a).

KOKKOKA – RATIRAHASYA

K. Mylius (1993), (1995), (1997). R. Schmidt (1911): 584–656. L. Sternbach (1962).

KUMĀRĪTANTRA¹⁰

S.C. Banerji (1992): 193, 201, 203, 209.

KŪRMAPURĀṆA

G.K. Pai (1973), (1975): 276–321. M. Saksenā and I.P. Siṃha (1991). P. Sensarma (1989): 27–37.

LALITAVISTARA

P.V. Sharma (1992a): 122–123. E.J. Thomas (1985).

LIṄGAPURĀṆA

Madanlal (1973).

MĀGHA

Atrideva (1956): 107–112. S. Sharma (1978).

MAHĀBHĀRATA

ABI 80–86. A.A. Ayer and A. Girija (1963). V.M. Bedekar (1964). J.L. Bhaduri, K.K. Tiwari, Biswarnoy Biswas (1971): 422. R.K. Bhārilla (1978). G.H. Bhatt (1960). A.K. Biswas and S. Biswas (1996): 57–67. P. Cordier (1894). J.R. Haldar (1977): 20. O.P. Jaggi IV, 46–48. Jyotir Mitra (1969), (1981), (1992): 34, (1995). M.A. Mehendale (1987a), (1987b), (1993). R.F.G. Müller (1934a): 86–87, (1935), (1942): 20–21, (1956), (1956a), (1963a). Om Prakash (1961): 102–131, (1987): II, 183–220. B. Rama Rao (1986). T. Śarmā (1981/82): 26–28. P.V. Sharma (1979a), (1992a): 89–92. C.V. Vaidya (1933): 103–121.

MAHĀBHĀṢYA

ABI 474–475. DGV IV, 215–216. D.K. Chakrabarti (1992): 105. Om Prakash (1961): 87–101, (1987): II, 164–182. P.V. Sharma (1970a): 25–39.

MAHĀKĀLATANTRA

S.C. Banerji (1992): 228, 246, 251. W. Stablein (1976a): 260–287.

MAHĀVAGGA

HIM III, 749–757. I.B. Horner (1962): 269–350 (Mahāvagga VI). R.F.G. Müller (1934a). D.V.S. Reddy (1984). P.V. Sharma (1992a): 118–119.

MAHĀVAMSA

W. Geiger (1960): 76–78. Gulabkunverba I, 305–306. R.F.G. Müller (1930d). D.V.S. Reddy (1962), (1966): 76–81. A. Senadhira (1995): 3. C.G. Uragoda (1975), (1987).

MAHĀVASTU

T. Rahula (1978): 348–352.

MAHĀVYUTPATTI

P. Cordier (1903a): 618–620.

MAHĀYĀNA LITERATURE

F. Huebotter (1932). Jyotir Mitra (1974): 56–62. N. Nakada (1987). P.V. Sharma (1992a): 122–125. R. Tripāthī (1987).

MALLINĀTHA

P. Hymavathi (1993): 25. K.S. Ramamurti (1971). B. Rama Rao (1979).

MAÑJUŚRĪMŪLAKALPA

M. Lalou (1932).

MANUSMṚTI

P. Cordier (1894). Gulabkunverba I, 354–355. Jyotir Mitra (1974): 39–48. R.F.G. Müller (1935a). Om Prakash (1961): 102–131, (1987): II, 183–220. P.V. Sharma (1979a).

MĀRKANḌEYAPURĀṆA

P.V. Sharma (1979a), (1992a): 95–96.

MĀTRKĀTANTRA¹¹

S.C. Banerji (1992): 225.

MATSYAPURĀṆA

B. Rama Rao (1965): 209. K.K. Handiqui (1949): 461. S.G. Kantawala (1964): 234–251 and 413–445. P. Sensarma (1989): 39–53. P.V. Sharma (1992a): 95.

MATSYASŪKTA(TANTRA)¹²

S.C. Banerji (1992): 187, 188, 192, 207, 209, 215, 219, 222, 223, 224, 232, 233, 234, 246, 247, 258. R. Mitra (1873): 16–17.

MATSYATANTRA¹³

S.C. Banerji (1992): 178, 215.

MĀYĀTANTRA¹⁴

S.C. Banerji (1992): 214.

MEDINĪ

P.V. Sharma (1979a): 58.

MILINDAPAÑHA

ABI 139–145. D. Chattopadhyaya (1979): 341–355. Jyotir Mitra (1974), (1985). A. Sharma (1989). P.V. Sharma (1992a): 121–122.

MṚGENDRATANTRA¹⁵

S.C. Banerji (1988): 394–396.

NANDIPURĀṆA

Gulabkunverba I, 298–300. Jyotir Mitra (1992): 37.

NĀRADAPURĀṆA

K. Damodaran Nambiar (1977): 278–334, (1979): 278–334. P.V. Sharma (1992a): 101.

NĀRADASMṚTI

J. Jolly (1893b).

NĪLATANTRA¹⁶

S.C. Banerji (1992): 218, 219, 220, 220–221.

PADMAPURĀṆA

B. Rama Rao (1977). P.V. Sharma (1992a): 94. Vibhā Devī (1978b).

PADMAŚRĪ – NĀGARASARVASVA

R.T. Vyas (1989): 58–61.

PAÑCATANTRA

Atrideva (1956): 71–72. P.V. Sharma (1972d): 251–256.

PĀṆINI

ABĪ 87–90. V. Agravāl (1946), (1955/56): 115–135 and 212–222. V.S. Agrawala (1913), (1940), (1946), (1949). Atrideva (1956): 24–27. R. Bhaṭṭācārya (1963/64). A.K. Biswas and S. Biswas (1996): 29–38 and 221–234. D.K. Chakrabarti (1992): 105. DGV IV, 213–214. O.P. Jaggi IV, 48. S. Jain (1978). Madhūlikā and Ś. Dīkṣit (1995). T. Śarmā (1981/82): 28–29. P.V. Sharma (1978), (1992a): 137–142. R.S. Singhand V.D. Vyas (1983).

PHETKĀRATANTRA¹⁷

S.C. Banerji (1992): 176, 228, 232, 238, 250.

PRAKRIT LITERATURE

K.T. Achaya (1994): 95, 97.

PRAPAÑCASĀRATANTRA¹⁸

S.C. Banerji (1988): 288–290.

PRAŚASTAPĀDA

J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 426–427.

PRAŚNOPANIṢAD

Madanlal (1977). R.S. Singh and V.D. Vyas (1983). P.V. Sharma (1992a): 95.

PURĀNAS

ABI 111–118. Anonymous (1965b). S.C. Banerji (1991): 73–149, 483–513. O.P. Jaggi IV, 49. J.J. Meyer (1930), (1933). D.V.S. Reddy (1965a), (1965b). T. Śarmā (1976), (1981/82): 19–20. B. Seal (1985): 187–188. P. Sensarma (1989). P.V. Sharma (1992a): 93–104. B. Tripāṭhī (1976).

RĀJAŚEKHARA

P.V. Sharma (1972d): 115, (1979a): 47, 48.

RĀJATARANĠINĪ

C.F. Heusinger (1847). J. Jolly (1914a). R.F.G. Müller (1930d). D.V.S. Reddy (1973).

RĀMĀYAṆA

ABI 76–80. J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 421–422. K.M. Balapure, J.K. Maheshwari, R.K. Tandon (1987). K.M. Bālāpure, R.K. Ṭaṇḍan, J. Māheśvarī (1990). A.K. Biswas and S. Biswas (1996): 57–67. Sibadas Chaudhuri (1952), (1953), (1954). P. Cordier (1894). P.C. Dharma (1938). J.R. Haldar (1977): 19–20. S.L. Hora (1952a). O.P. Jaggi IV, 46. S. Jain (1978). Jyotir Mitra (1968), (1969a). C.R. Karnick (1975). *K.H. Krishnamurthy (1996). Om Prakash (1961): 102–131, (1987): II, 183–220. J. Pāṇḍey (1996). D.V.S. Reddy *(1943), *(1944d), *(1945c). Mira Roy (1963). T. Śarmā (1981/82): 25–26. P.V. Sharma (1979a), (1992a): 87–89.

ŚAMĪKATANTRA

S.C. Banerji (1992): 196, 199.

ŚĀRṆGADHARAPADDHATI

R.T. Vyas (1989): 32–35.

SARVAVIJAYĪTANTRA

S.C. Banerji (1992): 242.

ṢAṢṬHĪTANTRA

S.C. Banerji (1992): 193, 198–199, 200, 205, 207–208.

ŚATAPATHABRĀHMAṆA

A.F.R. Hoernle (1978): 104–109, 238–239, 240–241. R.F.G. Müller (1934a), (1954).
Satyaparakāś (1960): 27–77.

SAUGATATANTRA

S.C. Banerji (1992): 209.

ŚIKHIMAYŪRATANTRA

S.C. Banerji (1992): 237.

ŚIVAGĪTĀ

A. Comba (1981), (1982), (1984b). *M. Vallauri (1942).

ŚIVAPURĀṆA

Anonymous (1965b): 209.

SKANDAPURĀṆA

R.K. Dube (1998). Gulabkunverba I, 300–301. Jyotir Mitra (1992): 37. S.R.N. Murthy (1990): 69–99.

SMARADĪPIKĀ

R. Schmidt (1911): 602, 615–616, 621–622, 627–628, 646, 653. L. Sternbach (1962).

SOMADEVA – KATHĀSARITSĀGARA

A. Chattopadhyay (1970). O.P. Jaggi V, 154–157. D.V.S. Reddy (1965), (1967).

SOMADEVA – YAŚASTILAKA

K.K. Handiqui (1949). R. Jain (1978). *D.V.S. Reddy (1975). Vibhādevī (1979).

ŚRAUTASŪTRAS

W. Caland (1901), (1902). R.F.G. Müller (1935d). P.V. Sharma (1992a): 28.

ŚRĪHARṢA – NAIṢADHĪYACARITA

K.T. Achaya (1994): 97. Ś. Śarmā (1977). P.V. Sharma (1972e).

ŚŪDRAKA

Atrideva (1956): 76–81.

ŚUKASAPTATI

R. Schmidt (1911): 274–285.

ŚUKRANĪTĪ

ABI 264–266. B.K. Sarkar (1974).

TAMIL LITERATURE

K.T. Achaya (1994): 43–52. K. Palanichamy and B. Lalitha Palanichamy (1983).

TANTRIC LITERATURE

S.C. Banerji (1988), (1992). B.C. Joshi (1984), (1986), (1987). B. Seal (1985): 219–228. W. Stablein (1976a): 21–83, (1976b), (1980). M.L. Walter (1980). A. Wayman (1973), (1976).

TĀRĀPRADĪPA¹⁹

S.C. Banerji (1992): 185, 186, 195, 198, 199, 204, 216–217, 219, 237, 241, 242, 251, 252, 254.

TĀRĀTANTRA²⁰

S.C. Banerji (1992): 6–9, 195, 237.

TELUGU LITERATURE

P. Hymavathi (1993): 25–28, 178–180, 186, 188–191, 201–204, 208–211, 213–216, 224–225, 242, 244–245, 248–252, 256, 260–261, 264–266, 268, 270, 275, 292–325, 337–351.

TODĀLATANTRA²¹

S.C. Banerji (1992): 186, 251.

TRIVIKRAMA BHATṬA

Atrideva (1956): 113–117.

TULSĪDĀS

K.M. Balapure, J.K. Maheshwari, R.K. Tanon (1987). K.M. Bālāpure, R.K. Tanan, J. Māheśvarī (1990). L.D. Dwivedi and L.V. Guru (1975). *P.V. Sharma (1971f). S. Soni (1981).

UDAYANA

K.A. Chowdhury (1971): 388.

UḍḍĀMARATANTRA²²

S.C. Banerji (1992): 178.

UMĀSVĀTĪ

J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 428–430.

UPANIṢADS

E. Abegg (1945): 5–36. G.W. Brown (1919), *(1921). DGV IV, 207. J.R. Haldar (1977): 19. R.F.G. Müller (1937b): 270–276. B. Rensch (1966). T. Śarmā (1981/82): 21–22. N. Śāstrī (1981). P.V. Sharma (1979a), (1992a): 27–28. P.V. Tewari (1992): 74–75.

VAIJAYANTĪKOŚA

P.V. Sharma (1979a): 45

VĀKPATIRĀJA – GAÜḌAVAHA

P.V. Sharma (1979a).

VĀMANAPURĀṆA

V.S. Agrawala (1964). A.S. Gupta (1968): Appendix 5. P. Sensarma (1989): 7–17. P.V. Sharma (1992a): 100–101.

VARĀHAMIHIRA

S.R.N. Murthy (1978), (1990): 21–32. P.V. Sharma (1972d), (1979a), (1986d). A.M. Shastri (1969), (1991), (1992). B.P. Shastri (1929). R.T. Vyas (1989): 38–44.

VĀRĀHĪTANTRA²³

S.C. Banerji (1992): 188, 195, 203, 206–207, 208, 210, 238, 242.

VARṆARATNĀKARA

P.D. Jopaṭ (1976).

VĀTSYĀYANA – KĀMASŪTRA

H.C. Chakladar (1919), (1929). B.H. Kapadia (1961/62). R. Schmidt (1911). P.V. Sharma (1979a). L. Sternbach (1962).

VĀYUPURĀṆA

D.R. Patil (1973). P. Sensarma (1989): 19–26. T. Śarmā (1981/82): 20. P.V. Sharma (1992a): 96–98.

VEDIC LITERATURE

E. Abegg ((1945): 5–36. ABI 7–75. K.T. Achaya (1994): 28–40. Atrideva (1978): 10–21. Th. Aufrecht (1870), *(1881). AVI 6–44 and 81–89. A.A. Ayer and A. Girija (1957). M.N. Banerjee (1927), (1929). A. Bareau (1969). E. Benveniste (1945). J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 417–421 and 425. A.K. Biswas and S. Biswas (1996): 5–27 and 213–220. C.J. Blair (1961): 97–107 and 136–157. I. Bloch (1902): 135–138. M. Bloomfield (1886), (1890), (1891). H.W. Bodewitz (1986). G.M. Bolling (1910), (1911), (1911a), (1912). J. Brough (1971), (1973). T. Burrow (1970). W. Caland (1901), (1902). D.K. Chakrabarti (1992): 96–104 and 120–123. C. Chakraborty (1977). K.A. Chowdhury (1971): 375–378. P. Cordier (1896). R.N. Dandekar (1938), (1950), (1995). R.P. Das (1987). DGV IV, 200. P.E. Dumont

(1957), (1958). K. Dvivedī (1993). V. Dvivedī (1966): 277–281. F. Edgerton (1958). T.I. Elizarenkova and V.N. Toporov (1976). R.E. Emmerick (1985). A.H. Ewing (1901). H. Falk (1989). J. Filliozat (1943), (1975). I. Fischer (1922). I. Gershevitch (1974). A.K. Ghosh and S.N. Sen (1971): 375–378. G.S. Ghurye (1979): 127–129, 220–221, 228–233, 242–244, 249–250, 266–269, 307–309. J. Gonda (1952). J.R. Haldar (1977): 11–12. J. Haudry (1988). V. Henry (1897), (1988). J. Hertel (1930). A.F.R. Hoernle (1906–1907), (1978). K. Hummel (1997). D.H.H. Ingalls (1971). K. Hoffmann (1955). O.P. Jaggi (1969): 166–220. S.W. Jamison (1986), (1987). W.A. Jayne (1925): 151–178. G.C. Jhala (1978). J. Jolly (1901): 16–17. *R.L. Jones (1995). Jyotir Mitra (1968a), (1970a), (1972a), (1979). R.N. Kapil (1970): 125–130. C.R. Karnick (1969), (1970), (1996): 11–27. C.G. Kashikar (1990). A.B. Keith (1908). S. Kramrisch (1975). A. Kuhn (1864). F.B.J. Kuiper (1969/70). P. Kutumbiah (1969): X–XV. G. Liétard (1862), (1898). A.A. Macdonell (1915). A.A. Macdonell and A.B. Keith II, 358–362. Madhūlikā (1995). S. Mahdihassan (1963), (1974), (1980b), (1981), (1982), (1982b), (1983), (1985), (1986), (1987a), *(1987b), (1988), (1989). G.P. Majumdar (1927), (1945), (1951), (1986). R.C. Majumdar (1971): 216–220. *S.Ch. Mitra (1933). J. Mulholland (1976). R.F.G. Müller (1930), (1930b), (1935d), (1942): 6–19, (1951), (1955), (1956b), (1958): 13–24, (1960a). J. Narten (1980). H. Nyberg (1995). Om Prakash (1961): 7–33, (1987): II, 58–94. A. Parpola (1995): 370–372. H.Ch. Patyal (1968/69), (1977). J. Puhvel (1970). N.A. Qazilbash (1960). M.S. Randhawa (1980): 297–300. K. Bhaskar Rao (1958). W. Rau (1974). P. Ray (1986a), (1986b). S. Raychaudhuri (1986). S.P. Raychaudhuri, L. Gopal, B.V. Subbarayappa (1971): 352–354. D.V.S. Reddy (1972c). *P. Regnaud (1897). L. Renou (1955). R. Roth (1871). P. Rolland (1972). Mira Roy (1967a). N.C. Śāh and D. Baḍolā (1977). V. Sarianidi (1998). D.C. Śarmā (1968/69). P.J. Sarma (1939). T. Śarmā (1981/82): 11–16 and 44–55. Satyaprakāś (1960): 1–26. L. von Schroeder (1908): 369–376. A.L. Sharma, A.B. Seerwani and V.R. Shastry (1972). D.C. Sharma and N.H. Keswani (1974). P.V. Sharma (1964a), (1965), (1971e), (1975c), (1977a), (1979a), (1992a): 11–67, (1992b). S.D. Sharma (1980). V.R. Shastry (1963). H.E. Sigerist (1961): 148–165. R. Singh (1998). R.S. Singh (1979a). W. Slaje (1997). S.C. Śrīvāstava *(1978a), (1978b), (1978c), (1979a), (1979b), (1979c), (1979d), (1980b), (1980c), (1980d), (1982). F. Staal (1975): 201–204. R. Stuhmann (1985). B.V. Subbarayappa (1971): 283–290. V. Śukla (1977). C. Suneson (1991). B.G.L. Swamy (1976a). P.V. Tewari (1992a). G.U. Thite (1982). A. Tivārī and Jyotirmitra (1981). M. Vallauri (1941): 20–27. Vishnu-Mittre (1970): 149–153. R. Gordon Wasson (1968), (1970), (1971), (1972), (1979). R. Gordon Wasson and D.H.H. Ingalls (1971). M.G. Weiss (1977): 7–11. G.L. Windfuhr (1985). H. Zimmer (1879), (1948). K.G. Zysk (1983), (1985a), (1993).

VEMANA

P. Hymavathi (1993): 94–97 and passim. V.V.S. Sastry (1977).

VIMALASŪRI – PAŪMACARIYA

K.R. Chandra (1970): 410–431, 450–453.

VĪRABHADRADEVA – KANDARPACŪḌĀMAṆI

R. Schmidt (1911): 603–605 and 616. L. Sternbach (1962).

VĪŚĀKHADATTA

Atrideva (1956): 82–88. D.V.S. Reddy (1966): 70–75.

VIṢṆUDHARMOTTĀRAPURĀṆA

P.K. Gode (1946k). L. Gopal (1982). K.K. Gupta (1994). A.F.R. Hoernle (1978): 42–43. R.F.G. Müller (1955): 142, (1963): 384. P.V. Sharma (1970a): 75–80, (1972d): 37–38 and 54. R.T. Vyas (1989): 44–46.

VIṢṆUPURĀṆA

P.V. Sharma (1992a): 98–99. B.R. Shastri (1973).

VIṢṆUSMRṬI

A.F.R. Hoernle (1978): 40–42, 59–61, 209–214. J. Jolly (1893b). J.J. Meyer (1928).

YĀJÑAVALKYASMRṬI

ABI 120–121. M. Choudhury (1967). J. Jolly (1893b). J.J. Meyer (1928). A. Śarmā (1975). P.V. Sharma (1970a): 47–49.

YAJURVEDA

AVI 37–38. DGV IV, 201. J.R. Haldar (1977): 12. R.F.G. Müller (1934). *S.S. Sharma (1989). V.J. Thakar (1992).

YĀMALATANTRA²⁴

S.C. Banerji (1992): 211, 214, 219.

YĀSKA

DGV IV, 216.

YOGASĀRATANTRA²⁵

S.C. Banerji (1992): 188.

YOGASŪTRA

ABI 745. P.V. Sharma (1970a): 39–43.

YOGINĪTANTRA²⁶

S.C. Banerji (1992): 254.

YUKTIDĪPIKĀ

A. Wezler (1990).

Addenda et corrigenda
&
Reprints

Addenda et corrigenda

Notice

The numbers of the notes to Chapter 9 of Part 2 (Suśrutasaṃhitā) of volume IA (pages 369–371) conflict with those of the corresponding chapters of volume IB (pages 489–492): the notes to volume IA begin with notes 1, 1a, 1, 2, etc., while those to volume IB begin with notes 1, 1a, 2, 3, etc.

In order to make them match, one should change the notes to volume IA by making the series begin with 1, 1a, 2, 3, etc.

The numbers of the notes to Chapters 2 to 6 of Part 3 (Aṣṭāṅgaḥṛdayasaṃhitā) of volume IA (pages 410–473) do not agree with the numbers of the notes to the corresponding chapters of volume IB (pages 528–594): the notes to volume IA begin with note 2, etc., whereas those to volume IB begin with note 1, etc.

Consequently, these numbers should be changed, either by making the notes to volume IA begin with 1, or making those of volume IB begin with 2.

In all cases where the presence or absence of an asterisk (*) in an annotation disagrees with the bibliography, the latter source is decisive.

IA, XIII: Cat. Calcutta Sanskrit College IX – change IX into X.

IA, 76, 1.16 from below: abut – change into: about.

IA, 80, 1.1: breast milk – change into: breastmilk.

IA, 80, 1.13: meausres – change into: measures.

IA, 333, 1.22 from below: *Kāśikāvṛtti* – change into: *Kāśikāvṛtti*.

IA, 503, 1.13: tāpa – change into: tāpa-.

IB, 15, n.145: See on karman – add: R.P. Goldman (1985).

IB, 16, n.146: M. Müller (n.d.) – change into: M. Müller (1919).

IB, 16, n.146: T.W. Rhys Davids (1899) – change into: T.W. Rhys Davids and C.A.F. Rhys Davids (1899).

IB, 19, n.205: See on the Indian hospitals for animals – add: R. Froehner (1968): 575–576.

IB, 19, n.205: *A. 'Īsā (1928) – change into: A. Issa Bey (1928).

IB, 20, n.207: See on kārpaśa – add: D. Schlinghoff (1974).

IB, 57, n.684: See on alcoholic drinks – add: B.R. Mitra (1873).

IB, 62, n.32: S.N. Mishra (1973–74) – change into: S.N. Mishra (1974).

- I B, 65, n.93: See on insanity: S. Pathak (1973–74) – change into: S. Pathak (1974); K.P. Shukla (1973–74) – change into: K.P. Shukla (1974).
- I B, 65, n.93: See on psychiatric syndromes in Indian patients: E.M. Hoch *(1967) – delete *; *N.C. Surya et al. (1964) – delete *; add: J. Ananth (1978); A. Chakraborty (1964); *S. Kakar (1975); M.S. Keshavan, H.S. Narayanan and B.N. Gangadhar (1989); B. Mohan (1973); S. Rao (1966a); N.N. Sen and N. Sundararaj (1958–1960); H.K. Sukthankar and N.S. Vahia (1965); N.S. Vahia (1963).
- I B, 71, n.48: *T. Elizarenkova (1987) – delete *.
- I B, 78, n.34: J. Brough *(1953) – delete *; edited (by P. Chentsalrao): add *; *translated into English – delete *.
- I B, 78, n.42: See on sexual fluids in Indian thought – add: B. Dossi (1998).
- I B, 79, n.56: See on transvestism, homosexuality, etc., in India – add: *G.T. Artola (1975); S. Caldwell (1999a); L. Zwillig (1989).
- I B, 80, n.64: see on the ātivāhikaśārīra – add: B. Dossi (1998): 139–150.
- I B, 81, n.83: See on Indian embryology – add: B. Dossi (1998): 91–97.
- I B, 92, n.285: See on the Indian joint family – add: A. Collins and P. Desai (1999); W. Doniger (1993); J. Mencher (1963); M. Mines (1994); L.B. Murphy (1953); T. Poffenberger (1981).
- I B, 92, n.285: *G. Bose (1949), (1950) – change into: G. Bose (1949), *(1950).
- I B, 92, n.285: *A. Dammann (1993) – delete *.
- I B, 95, n.32: See on dreams – add: A. Crescenzi and F. Torricelli (1997).
- I B, 98, n.11: See for some studies: J.D. Gode (1973–74) – change into: J.D. Gode (1973); *J.K. Ojha (1978) – delete *.
- I B, 98, n.12: See for some studies: J.D. Gode (1973–74) – change into: J.D. Gode (1973).
- I B, 104, n.116: See on sorcery – add: G. Obeyesekere (1975); G. Tarabout (1994).
- I B, 105, n.129: See on this mātṛgaṇa – add: N.P. Joshi (1986); O.P. Misra (1989); S.K. Panikkar (1997).
- I B, 106, n.154: S.N. Mishra (1973–74) – change into: S.N. Mishra (1974).
- I B, 107, n.177: See on the treatment of diabetes mellitus: A.N. Chaddha (1973–74) – change into: A.N. Chaddha (1974).
- I B, 108, n.177: M.C. Pandey (1973–74) – change into: M.C. Pandey (1975); Raghunathan and P.V. Sharma *(1968) – delete *; *V.K. Shah (1995): delete *.
- I B, 109, n.206: See on the treatment of leprosy: A. Kumar (1973–74) - change into: A. Kumar (1974); B.P. Singh (1971–73) – change into: B.P. Singh (1973).
- I B, 110, n.218: See on the treatment of śvitra: Z. Ansari (1971–73) - change into: Z. Ansari (1973).
- I B, 112, n.256: P.J. Claus *(1975) – delete *; see, for example - add: B. Becker-Pfleiderer and Virchand Dharamsey (1978); M. Carrin (1999a), (1999b); A.G. Gold (1988); B. Pfeiderer (1983), *(1994); J. Richardson Freeman (1993); E. Schoembucher (1993).
- I B, 112, n.264: See on the gandharvas – add: B. Dossi (1998): 139–150; F.B.J. Kuiper (1996).
- I B, 113, n.271: See on the treatment of unmāda: S. Pathak (1973–74) - change into:

- S. Pathak (1974).
- I B, 113, n.271: See on psychotherapy in India – add: S. Kalkar (1986), (1990a); B.K. Ramanujam (1986), (1999); A. Roland * (1985), * (1991), (1994).
- I B, 113, n.271: See on āyurvedic drugs used in treating mental disorders – add: N.C. Surya et al. (1965).
- I B, 113, n.271: See on the religious treatment of mental illness – add: P. Homans (1984); V. Skultans (1988).
- I B, 113, n.271: See on the treatment of mental disorders in general - add: B.B. Sethi, S. Sachdev and D. Nag (1965); See on the relevance of Yoga – N.S. Vahia et al. * (1973b) – delete *.
- I B, 116, n.321: See on cancer in India – add: W.C. Bentall (1908); R.R. Cooke (1976); D.J. Jussawalla (1976a), (1976b); V.R. Khanolkar (1944a); U.K. Luthra (1976); S. Nissanga (1976); I.M. Orr (1933); J.C. Paymaster (1956); P.N. Wahi (1976); P.N. Wahi et al. (1965); P.N. Wahi, U. Kehar and B. Lahiri (1965).
- I B, 116, n.321: *R. Akhtar (1978b) – delete *.
- I B, 116, n.321: delete R. Akhtar and N. Izhar (1982).
- I B, 117, n.336: See on filariasis in India – add: L. Bandyopadhyay (1996).
- I B, 119, n.361: See on the actions of rohīṭaka: L.M. Singh (1973–74) - change into: L.M. Singh (1973).
- I B, 120, n.389: See on grahaṇīdoṣa: O.P. Dixit (1973–74) – change into: O.P. Dixit (1974).
- I B, 121, n.408: See on some studies: O.P. Dixit (1973–74) – change into: O.P. Dixit (1974).
- I B, 121, n.415: See on this disease: R.D. Tripathi (1973–74) – change into: R.D. Tripathi (1974).
- I B, 121, n.416: E. Thurston (1901) – delete (1901).
- I B, 122, n.427: See on the treatment of kāmālā – add: M.S. Durkin-Longley (1982): 323–348.
- I B, 123, n.459: See on the treatment of eosinophilia: B.P. Shaw (1973–74) – change into: B.P. Shaw (1974).
- I B, 125, n.501: See on psychosomatic disease in India – add: E.M. Hoch (1965); M. Pflanz and L. Lambelet (1965).
- I B, 125, n.502: See on diarrhoea in India – add: R.A. Feldman, P. Bhat and K.R. Kamath (1970); B. Lozoff, K.R. Kamath and R.A. Feldman (1975).
- I B, 134, n.724: P.D. Gupta (1973–74) – change into: P.D. Gupta (1974).
- I B, 134, n.725: See on the treatment of aśmarī – R.P. Singh (1973–74) – change into: R.P. Singh (1973); add: L.M. Singh, J.P. Shukla and P.J. Deshpande (1987).
- I B, 135, n.733: See on the treatment of hṛdroga: G.N. Chaturvedi (1973–74) – change into: G.N. Chaturvedi (1973); See on drugs lowering the cholesterol level: D.V. Aggarwal (1971–73) – change into: D.V. Aggarwal (1973).
- I B, 142, n.878: See on the treatment of karṇinī: S.K. Negi (1973–74) - change into: S.K. Negi (1974).
- I B, 142, n.896: See on the treatment of pradara: S. Kumari (1973–74) - change into: S. Kumari (1974).

- I B, 148, n.120: J.-A. Decourdemanche *(1913) – delete *.
- I B, 142, n.888 – add: See on pradara: M.S. Durkin-Longley (1982): 290–323.
- I B, 142, n.896 – add: See on the treatment of pradara: M.S. Durkin-Longley (1982): 290–323.
- I B, 184, n.16: *H. Maspero – delete *.
- I B, 184, n.20: D.C. Sircar (1986c) – change into: D.C. Sircar (1968c).
- I B, 186, n.40: hemānta – change into hemanta.
- I B, 186, n.49: See on these Śākadvīpīyabrāhmaṇas – add: K.K. Roy (1974): 699.
- I B, 187, n.60 – add: Carakas are mentioned in Sphujidhvaja's *Yavana-jātaka* (22.1: āhnikā; ed. D. Pingree). See on references to them also: D. Pingree (1978): II, 311.
- I B, 187, n.61: See on Nahapāna, Ṛṣabhadatta – add: D. Pingree (1978): I, 10–13.
- I B, 188, n.73: *A. Parpola (1977) – delete *.
- I B, 190, n.116: A. Weber *(1852) – delete *.
- I B, 195, n.176: *critical edition – delete *.
- I B, 235, n.5 – add: V.G. Rahurkar (1984).
- I B, 302, n.500: *H.D. Velankar – delete *.
- I B, 313, n.1: Editions of the *Suśrutasaṃhitā* – add to ed. cc: *repr., Jayakṛṣṇadāsa Āyurveda Granthamālā 34, Caukhambā Orientalia, Vārāṇasī/Dillī 1997; *repr., Krishnadas Ayurveda Series No. 51, 1998; add to ed. t: *repr., Caukhambā Āyurvijñān Granthamālā 60, Vārāṇasī 1999.
- I B, 314, n.1: Translations of the *Suśrutasaṃhitā* – add: *Suśruta-saṃhitā*, with English translation of text and Ḍaḥaṇa's commentary along with critical notes, edited and translated by Priya Vrat Sharma, Haridas Ayurveda Series 9, Chaukhambha Visv-abharati, Varanasi 1999.
- I B, 315, n.1: Translations of the *Suśrutasaṃhitā* – add to ed. e: *repr., edited by Jyotir Mitra, Chowkhamba Sanskrit Studies Vol. XXX, Varanasi 1998.
- I B, 323, n.110: See on the preparation and use of kṣāra: S.K. Pandey (1973–74) – change into: S.K. Pandey (1974).
- I B, 327, n.186: See on Indian rhinoplasty – add: T.J.S. Patterson (1974).
- I B, 338, n.445: *Y.C. Roy (1916) – change into: B.J.C. Ray (1918).
- I B, 349, n.689: See on betel – add: J.R. Marr (1972): 45–47.
- I B, 352, n.734: See on mantha – add: S. Einoo (1985).
- I B, 352, n.757: See – add: S. Einoo (1985).
- I B, 352, n.758: See – add: S. Einoo (1985).
- I B, 363, n.233: See on plague in India – add: D. Arnold (1991); M.N. Pearson (1995): 153–154.
- I B, 370, n.4: M. Müller, n.d. – change into: M. Müller, 1919.
- I B, 389, n.258: See on the Uttarakurus – add: G. Tucci (1971): II, 508, n.1.
- I B, 399, n.131: see on her and her cult – add: P.K. Maity (1989): 70–81.
- I B, 400, n.163: *R. Bleichsteiner (1937) – change into: *R. Bleichsteiner (1934).
- I B, 403, n.12: See on Indian ophthalmology – add: K.M. Shyam Sundar (1996).
- I B, 413, n.283: *P. Breton (1826) – delete *; R.H. Elliot *(1917b) – delete *.
- I B, 474, n.187: *V.G. Rahurkar (1964) – delete *.

- I B, 476, n.213: *L.de la Vallée Poussin (1931/32): I, 383, (1937): V, 270 – change into: *L. de la Vallée Poussin (1931/32): I, 383.
- I B, 476, n.216: *E. Lamotte (1966): XI – change into: E. Lamotte (1966): XI–XIV.
- I B, 479, n.267: *Edition – delete *.
- I B, 479, n.268: *P.V. Sharma (1993c) – delete *.
- I B, 485, n.401: Sempa Dorjee (1979) – change into: Sempa Dorje (1998).
- I B, 513, n.1: Editions of the *Aṣṭāṅgaḥṛdayasaṃhitā* – add: *Aṣṭāṅgaḥṛdaya of Śrīmad-vāgbhata, edited by Brahmānand Tripathī, Vrajajivan Ayurvijnana Granthamala 27, Delhi 1999.
- I B, 516, n.1: Translations of the *Aṣṭāṅgaḥṛdayasaṃhitā* – add: *Aṣṭāṅga Hṛdaya of Vāgbhata: the book of eight branches of Ayurveda; English translation by a board of scholars, 3 vols., Indian Medical Science Series Nos. 75, 76, 77, Sri Satguru, Delhi 1999.
- I B, 564, n.102: Compare Kāṅkhorda – add: see on Kāṅkhorda: J. Nobel (1958): I, 230–233 (see: *Suvarṇaprabhāsaśūtra*, n.1453).
- I B, 598, n.1: Translations of the *Aṣṭāṅgasamgraha* – add: *Aṣṭāṅga Saṃgraha of Vāgbhata: the compendium of eight branches of Ayurveda; text and English translation with illustrations by a board of scholars; introduction by Vaidya Asha Ram, 3 vols., Indian Medical Science Series Nos. 74, 78, 79, Sri Satguru, Delhi 1999.
- I B, 643, n.36: *E.M. Hare – delete *.
- I B, 643, n.36 – add: See on *musāragalva*: S.K. Chatterji (1939): 71–74; G. Tucci (1971): II, 519.
- I B, 679, n.62: See on the Śakas – add: D. Pingree (1978): I, 6–22.
- I B, 682, n.105: See on *Aparājita* – add: F.W. Thomas (1903); L.A. Waddell (1912/1913): 173.
- I B, 682, n.108: See on *Tārā* – add: D. Kinsley (1997; see index).
- I B, 683, n.120: See on *Avalokiteśvara* – add: J.K. Locke (1980): 405–418.
- I B, 683, n.122: *N. Dutt (1939) – delete *.
- I B, 683, n.124: See on *Parṇasabari* – add: F.W. Thomas (1903).
- I B, 684, n.139 – add: See on *sitātapatra-* and *uṣṇīṣaviṣajyādhāraṇīs*: F.W. Thomas (1903); L.A. Waddell (1912/1913): 173.
- I B, 720, n.1191: *Bhagwan Dash* *(1995b), *(1998) – delete *; add: *Bhagwan Dash* (1999).
- I B, 765, n.255: T.W. Rhys Davids (*1899: II, 65) – change into: T.W. Rhys Davids and C.A.F. Rhys Davids (1899: *II, 65).
- I B, 766, n.259 – add: *Jyotir Mitra* (1999a).

Reprints*

* The following pages are corrected versions of the technically defective pages in
Volume IA.

Sixty-three combinations of tastes are distinguished;⁴⁷⁹ these combinations become innumerable if the after-tastes (anurasa) are also taken into consideration. Taste and after-taste are defined.⁴⁸⁰ Successful treatment depends on the proper administration of drugs with a particular combination of tastes (26.14–28).

The list of ten guṇas⁴⁸¹ consists of paratva (superiority), aparatva (inferiority),⁴⁸² yukti,⁴⁸³ saṃkhyā (number), saṃyoga (conjunction),⁴⁸⁴ vibhāga (disjunction),⁴⁸⁵ prthaktva (separateness),⁴⁸⁶ parimāṇa (measurement), saṃskāra (processing),⁴⁸⁷ and abhyāsa (repetitive practice) (26.29–35).

The relationships between the six tastes and the five mahābhūtas are discussed (26.39–41).⁴⁸⁸

The properties and actions of each of the six tastes are elaborately described (26.43),⁴⁸⁹ followed by relationships between tastes on the one hand, vīrya, guṇa and karman on the other; exceptions to general rules are given; the three degrees of the six chief properties (guṇa) with regard to the tastes are discussed (26.45–56).⁴⁹⁰

Vipāka (post-digestive taste) is dealt with; kaṭu, tikta and kaṣāya are transformed into kaṭu, amla remains amla, madhura and lavaṇa are madhura after digestion; three degrees of vipāka are distinguished (26.57–63).⁴⁹¹

Vīrya is taken account of; the number of vīryas is either eight: mṛḍu (soft), tīkṣṇa (sharp), guru (heavy), laghu (light), snigdha (oleaginous), rūkṣa (dry), uṣṇa (hot) and śīta (cold), or two only: śīta and uṣṇa (26.64–67).⁴⁹²

Prabhāva (specific action) is described as a property which cannot be explained, being beyond reasoning (acintya) (26.68–71).⁴⁹³

Vipāka is declared to be stronger than rasa, vīrya overcomes vipāka, and prabhāva is even stronger than vīrya (26.72).⁴⁹⁴

Actions of the tastes are mentioned again (26.74–79).⁴⁹⁵

After this long exposition of Ātreya, Agniveśa asks him to give an account of disagreeing (vairodhika) articles of food.⁴⁹⁶ Ātreya, complying with this request, says that substances may be antagonistic to constituents (dhātu) of the body due to their properties, combination, processing, nature (svabhāva), etc. As an example he mentions the combination of fish and milk. Bhadrakāpya objects, asserting that milk may freely be taken together with fish, the fish called cilicima excepted (26.80–83).⁴⁹⁷

A long exposition by Ātreya on numerous antagonistic articles of diet (26.84),⁴⁹⁸ types of antagonism (26.86–101),⁴⁹⁹ bad effects of antagonistic foods, and the treatment of disorders resulting from disregarding the rules (26.102–106), is found at the end of the chapter.

Chapter twenty-seven, called annapānavidhi,⁵⁰⁰ is concerned with articles of diet (anapāna) and describes their medicinal properties and actions.

The foods and drinks are divided into the following groups:⁵⁰¹ śūkadhānya (awned cereals; 27.8–22);⁵⁰² śamīdhānya (pulse; 27.23–34);⁵⁰³ māṃsa (meat; 27.35–87);⁵⁰⁴ śāka (vegetables; 27.88cd–124);⁵⁰⁵ phala (fruits; 27.125–165);⁵⁰⁶ harita (vegetables used in salads; 27.166–177);⁵⁰⁷ madya (alcoholic drinks; 27.178–195);⁵⁰⁸ jala (water; 27.196–216);⁵⁰⁹ gorasa (milk and milk products; 27.217–236);⁵¹⁰ ikṣu (the sugarcane and its products; 27.237–242);⁵¹¹ honey⁵¹² and a disorder caused by honey (madhvā-

tients exhibiting such signs are therefore called *puṣpita*.¹⁸

Aṛiṣṭas relating to the smell emitted by a patient's body are described (2.8–16),¹⁹ followed by those relating to its taste, as may be deduced from its attractiveness to various kinds of insects (2.17–22).

Chapter three, called *parimarśanīya*, is about fatal signs to be ascertained by means of palpation (*parimarśana*, *sparśa*), followed by some other categories of *aṛiṣṭas*.

Rules for palpation and inauspicious abnormalities found by means of this procedure are described (3.4–5).²⁰

The physician should also examine the patient's way of breathing (*ucchvāsa*), the region of the carotid arteries (*manyā*), the teeth, eyelashes, eyes, hair of the head and body, belly, nails and fingers. Fatal signs relating to breathing and signs occurring in the mentioned parts of the body are described (3.6).

Chapter four, called *indriyānīka*,²¹ is concerned with *aṛiṣṭas* pertaining to the functions of the senses; this category has to be determined by means of inference (*anumāna*) (4.3–4).²² Many fatal signs of this type are described.²³

Chapter five, called *pūrvarūpīya*,²⁴ deals with fatal prodromes (*pūrvarūpa*).²⁵ In general, presence of the complete set of prodromes of a particular disease indicates a fatal outcome (5.3–5). Prodromes, pointing to the severe character of a series of particular diseases, are described. Dreams (*svapna*) form a conspicuous element among these fatal signs (5.6–25).²⁶

Numerous dreams auguring imminent death or great anguish (*dāruṇāḥ svapnāḥ*) are described (5.27–39).²⁷ Healthy persons, having the same dreams, may sometimes escape this fate (5.40). The *dāruṇa* dreams are explained as having an organic basis (5.40–41).²⁸

Seven types of dreams are distinguished: based on visual perceptions (*dṛṣṭa*), based on auditory perceptions (*śruta*), perceptions by other senses (*anubhūta*),²⁹ based on wishes (*prārthita*), based on imagination (*kalpita*), pointing to future events (*bhāvika*), and based on disturbances of the *doṣas* (*doṣaja*) (5.43). The first five types have no effects (*aphala*);³⁰ the same applies to dreams experienced during day-sleep and to those which are very short or very long³¹ (5.44).³² Dreams occurring during the first part of the night have weak results (5.45ab).³³ The effect of a dream becomes operative at once if one does not sleep again after dreaming it (5.45cd).³⁴ The prognostic meaning of an inauspicious dream is annulled when it is followed by one to be regarded as auspicious (5.46).³⁵

Chapter six, called *katamāṇisārīya*, describes signs which should make the physician decide to give up treatment.³⁶

Chapter seven, called *pannarūpīya*,³⁷ deals with the prognostic significance of a patient's *chāyā*, *praticchāyā* and *prabhā* (7.3–17), followed by various *aṛiṣṭas* (7.18–31).

Individuals are of three types according to their measurement: short, medium

(9.89cd–94);²⁷⁷ treatment of unmāda in the same way as apasmāra (9.95);²⁷⁸ the prevention of unmāda (9.96); the signs indicating recovery (9.97).

Recipes provided with a name are: kalyāṇakaghṛta (9.33cd–42ab),²⁷⁹ mahā-kalyāṇakaghṛta (9.42cd–44),²⁸⁰ mahāpaiśācīkaghṛta (9.45–48),²⁸¹ laṣuṇādyaghṛta (9.49–51), and a second laṣuṇādyaghṛta (9.52–56).²⁸²

Chapter ten, on apasmāra (epilepsy), deals with: a definition of this disease (10.3);²⁸³ its aetiology (10.4–5) and pathogenesis (10.6–8ab);²⁸⁴ the four types of apasmāra: caused by vāta, pitta, kapha and saṃnipāta; their symptoms²⁸⁵ and degrees of curability; the intervals between the attacks (10.8cd–13); treatment of apasmāra (10.14–52);²⁸⁶ apasmāra, in which an āgantū factor is secondarily (as an anubandha) involved,²⁸⁷ added to the doṣic aetiology, should be treated in the same way as the āgantū type of unmāda (10.53); the aetiology, pathogenesis (saṃprāpti), symptomatology and therapy of the major disease (mahāgāda) called atattvābhīniveśa (10.54–63);²⁸⁸ the treatment of chronic (cirakārin) epilepsy which has acquired a firm footing (kṛtāspada) (10.64–65); precautions to be taken by a patient suffering from apasmāra (10.66).

Recipes provided with a name are: pañcagavyaghṛta (10.16–17)²⁸⁹ and mahā-pañcagavyaghṛta (10.18–24).²⁹⁰

Chapter eleven is concerned with kṣataksīṇa (injury to the chest and its effects).²⁹¹

The subjects dealt with are: the aetiology of this disease (11.4–8); its pathogenesis; kṣata (injury) of the chest leads to kṣaya (wasting), due to deficiency of śukra and ojas (11.9–12ab); the prodromes²⁹² and symptoms (11.12cd–13); the degrees of curability (11.14); treatment (11.15–95).

Recipes provided with a name are: elādiḡuṭikā (11.21–24),²⁹³ amṛtapraśāghṛta (11.35–43),²⁹⁴ śvadaṃṣṭrādighṛta (11.44–47), five varieties of sarpīrgūda (11.50–55, 56–61, 62–65, 66–69, 70–77),²⁹⁵ saindhavādicūrṇa (11.85–87), and śāḍava (11.88–90).

Chapter twelve is about śvayathu (swelling).²⁹⁶

It deals with the following subjects: the classification of the types of this disorder: caused by vāta, pitta and kapha, nija and anija (= āgantū), localized (ekāṅga) and generalized (sarvaja)²⁹⁷ (12.4);²⁹⁸ the aetiology of the nija and āgantū types (12.5–7ab);²⁹⁹ three varieties of the nija and āgantū types according to their seat: the whole body, half of it, or part of it (12.7cd); the saṃprāpti of śvayathu (12.8); śvayathu occurring in the upper (ūrdhva), lower (adhoga) and middle part (madhyaga) of the body, śvayathu of the whole body (sarvāṅga), and localized forms, called after the part affected (12.9); the prodromes (12.10ab); all varieties of śvayathu are caused by the three concerted doṣas, but they are designated after the predominant doṣa and treated accordingly (12.10cd); the symptoms of śvayathu in general (12.11); the symptoms of śvayathu with a predominance of vāta (12.12), pitta (12.13) and kapha (12.14);³⁰⁰ six fatal complications (12.15);³⁰¹ signs indicating curability (12.16ab); the treatment of śvayathu³⁰² (12.16cd–73).³⁰³

of rakta is bile (pitta); the waste products of māṃsa consist of the impurities of the bodily orifices; the waste product of medas is sweat (sveda), of asthi the hairs of head (keśa) and body (loman), of majjā the fatty substance (sneha) of eyes, faeces and skin; these substances support (upasaṃstambha) each other and maintain the body (15.18–19).

The intake of aphrodisiacs (vṛṣya) accelerates the processes described. Some are of the opinion that the process of conversion of the bodily elements (parivartana) is completed in a period of six days; however, the transformational processes (parivṛtti) take place continually in a cyclic way (cakravat) (15.20–21).³⁹⁷

On the request of his pupil, Ātreya explains the changes of the properties of the bodily elements in the course of the transformational processes (15.22–35).³⁹⁸

The vyāna disperses the element rasa continually throughout the body; a local morbid alteration (vikṛti) appears if this moving about of rasa is blocked at a particular place due to pathological changes of channels (khavaigunya); the doṣas are subsequently excited at that very place (15.36–38ab).

The digestive fire is the chief one (adhipa) among all the bodily fires (paktar), which are dependent on it. For this reason it should be carefully protected, since, otherwise, grahaṇīdoṣa may develop (15.38cd–41).

The aetiology of disorders of the digestive fire (agnidoṣa) is described,³⁹⁹ followed by their symptoms, in combination with excitation of one of the three doṣas (15.42–49).

The actions on the dhātus of a normal digestive fire and of a disordered fire are described (15.50–51ab).

A weak digestive fire leads to incomplete digestion (vidāha) of the ingested food, which then moves upwards or downwards; the disorder is called grahaṇīgāda if it moves downwards. The symptoms are described, followed by the prodromes (15.51cd–55).⁴⁰⁰

The grahaṇī and its functions are dealt with (15.56–57).⁴⁰¹

The aetiology and symptomatology of grahaṇīdoṣa caused by vāta, pitta, kapha and saṃnipāta are discussed.⁴⁰² The three disorders of the digestive fire mentioned in the rogāṇīka chapter⁴⁰³ are included under the heading of grahaṇīdoṣa (15.58–72).

The remaining part of the chapter is devoted to the treatment of grahaṇīdoṣa⁴⁰⁴ and agnidoṣa (15.73–243).

Recipes provided with a name are: daśamūlādyaghrta (15.82–86),⁴⁰⁵ tryūṣaṇādyaghrta (15.87),⁴⁰⁶ pañcamūlādyaghrta and -cūrṇa (15.88–93), citrakādyagutikā (15.96–97), maricādyacūrṇa (15.98–110),⁴⁰⁷ takrāriṣṭa (15.117cd–121),⁴⁰⁸ canda-nādyaghrta (15.125–128), nāgarādyacūrṇa (15.129–131),⁴⁰⁹ bhūnimbādyacūrṇa (15.132–133), kirātādyacūrṇa (15.134–140),⁴¹⁰ madhūkāsava (15.146–149),⁴¹¹ durālābhāsava (15.152–155),⁴¹² mūlāsava (15.156–159), piṇḍāsava (15.160–162), madhvariṣṭa (15.163–167), ṣaṭpalaghrta (15.168–170),⁴¹³ kṣāraghrta (15.171–172),⁴¹⁴ and several kinds of kṣāra (15.177–193).

Chapter sixteen is concerned with pāṇḍuroga (morbid pallor and related disorders).⁴¹⁵

Subjects dealt with are: the five types of pāṇḍuroga, caused respectively by vāta, pitta, kapha, saṃnipāta and the eating of earth (mṛdbhakṣaṇa)⁴¹⁶ (16.3);⁴¹⁷

quickly as possible (17.68cd–69).

The remaining part of the chapter (17.70–151)⁴⁶³ is devoted to treatment⁴⁶⁴ (17.68–150).⁴⁶⁵

Recipes provided with a name are: muktādyacūrṇa (17.125–128), tejovatyādighṛta (17.141cd–144),⁴⁶⁶ and manāḥśilādighṛta (17.145–146).

Chapter eighteen is concerned with kāsa (cough).⁴⁶⁷

Its subjects are: the five types of kāsa: three types caused by the doṣas, one caused by a trauma (kṣāta), and one caused by wasting (kṣaya);⁴⁶⁸ they lead to wasting when they are progressive (18.3–4); the prodromes (18.5);⁴⁶⁹ the saṃprāpti (18.6–8);⁴⁷⁰ the causes of the specific characteristics (18.9); the aetiology and symptomatology of kāsa brought about by vāta (18.10–13),⁴⁷¹ pitta (18.14–16),⁴⁷² kapha (18.17–19),⁴⁷³ injury to the chest (urāḥkṣāta) (18.20–23),⁴⁷⁴ and wasting (18.24–29a);⁴⁷⁵ kāsa due to wasting is fatal in wasted (kṣīṇa) patients, but curable in strong ones; kāsa of traumatic origin is palliable in strong patients; both types are sometimes curable if they are of recent origin and correctly treated; kāsa appearing in old age (jarākāsa) is palliable (18.29–30).⁴⁷⁶

The remaining part of the chapter is devoted to treatment⁴⁷⁷ (18.31–190).⁴⁷⁸

Recipes provided with a name are: kaṇṭakārighṛta (18.35),⁴⁷⁹ pippalyādighṛta (18.36–38),⁴⁸⁰ tryūṣaṇādyaghrta (18.39–42),⁴⁸¹ rāsnāghṛta (18.43–46),⁴⁸² citrakāḍileha (18.53–56), āgastyaharītakī (18.57–62),⁴⁸³ daśamūlādighṛta (18.123–124),⁴⁸⁴ a second kaṇṭakārighṛta (18.125–128), kulatthādighṛta (18.129),⁴⁸⁵ dvipaṇcamūlādighṛta (18.158–160), guḍūcyādighṛta (18.161–162),⁴⁸⁶ harītakīleha (18.168–169), and padmakāḍileha (18.174–175).⁴⁸⁷

Chapter nineteen gives an exposition on atisāra (diarrhoea).⁴⁸⁸

It begins with a story on the first appearance⁴⁸⁹ of this disease. During the first age of the world (ādikāla) the sacrificial animals were not killed, but only taken hold of. Later, after Dakṣa's sacrifice,⁴⁹⁰ the animals began to be consecrated (prokṣaṇa)⁴⁹¹ with their own consent (abhyanuñāna), in the sacrificial rites (kratu) of the sons of (Vaivasvata) Manu, called Nariṣyant, Nābhāga, Ikṣvāku, Nrga, Śaryāti,⁴⁹² etc. Still later, Prṣādhra⁴⁹³ started sacrificing cattle, because other animals were not available for his prolonged soma ritual (dīrghasattra).⁴⁹⁴ This made all creatures grief-stricken, and, when the meat of these cattle was consumed, all creatures began, because of their mental affliction and, consequently, by an impaired digestive fire, to suffer from diarrhoea, due to the properties of this inauspicious (aśasta) food (19.4).

The chapter proceeds with: the description of the aetiology⁴⁹⁵ and symptomatology of atisāra caused by vāta (19.5), pitta (19.6), kapha (19.7);⁴⁹⁶ two saṃnipāta types of atisāra⁴⁹⁷; degrees of curability⁴⁹⁸ (19.8–10); atisāra due to fear (bhaya)⁴⁹⁹ and grief (śoka);⁵⁰⁰ the last two types, of a mental and exogenous nature, present the same symptoms as atisāra caused by vāta (19.11).⁵⁰¹

The remaining part of the chapter is devoted to the treatment of the curable kinds of the six types of atisāra⁵⁰² (19.12–122).⁵⁰³ A recipe called cāṅgerighṛta is mentioned (19.43).⁵⁰⁴

enumerated, followed by the characteristics of persons who are bitten by these three kinds,⁵⁸⁴ by a pregnant (garbhīṇī) snake,⁵⁸⁵ and by one who has given birth (sūtā);⁵⁸⁶ a four-footed snake, born from a godhā, is called a gaudheyaka and resembles a black snake (kṛṣṇasarpa);⁵⁸⁷ several other crossbreeds (mīśrajāti) are known;⁵⁸⁸ the characteristics of serious (bhṛṣābādha) and less serious bites (23.130–135); the black snake when young, the gonasa⁵⁸⁹ of advanced age, and the adult rājīmant are like āśīviṣa (23.136);⁵⁹⁰ the four fangs of venomous snakes, their colours, the quantity of poison they contain (23.137–139); the two kinds of poisonous kīṭas,⁵⁹¹ arising from the faeces and urine of snakes: those containing dūṣīviṣa (slowly acting poison) and those containing prāṇahara (deadly) poison; the characteristics of the bites of these kīṭas and the symptoms produced (23.140–143); the signs and symptoms of a bite by a dūṣīviṣa spider (lūtā) and of spiders in general (23.144–146);⁵⁹² the signs and symptoms of bites and stings by a rat (ākhu, mūṣika),⁵⁹³ lizard (kṛkalāsaka),⁵⁹⁴ scorpion (vr̥ścika),⁵⁹⁵ kaṇabha,⁵⁹⁶ uccīṭiṅga,⁵⁹⁷ frog or toad (maṇḍūka),⁵⁹⁸ fish (matsya), leech (jalaaukas),⁵⁹⁹ gecko (gṛhagodhikā),⁶⁰⁰ centipede (śatapadī),⁶⁰¹ gnat (maśaka),⁶⁰² fly or bee (makṣikā),⁶⁰³ and sthagikā⁶⁰⁴ (23.147–158); bites leading to death (23.159–161ab);⁶⁰⁵ factors aggravating the effect of poison (23.162); snakes whose venom has a mild effect (23.163);⁶⁰⁶ anger is the releasing factor of venom in snakes (23.164);⁶⁰⁷ vāta predominates in the poison of uccīṭiṅga and scorpion, vāta and pitta in that of kīṭas, kapha in that of the kaṇabha, etc.; treatment should consist of the prescription of substances counteracting these doṣas (23.165–166); the symptoms produced by a poison in which respectively vāta, pitta or kapha predominates (23.167–169); treatment of the bites and stings mentioned (23.170–174);⁶⁰⁸ the bite of a dog excites the three doṣas and corrupts the bodily elements; the symptoms of a dogbite;⁶⁰⁹ the bites of other fierce animals (vyāla); poisonous and non-poisonous bites (23.175–178); treatment of diverse kinds of poisoning⁶¹⁰ (23.179–249);⁶¹¹ the section on treatment mentions a poisonous animal called viśvambhara (23.214);⁶¹² the condition called śaṅkāviṣa, i.e., the anxiety of someone who thinks to have been bitten (by a snake), is described, as well as its treatment (23.221–223);⁶¹³ things wholesome and wholesome to victims of poisoning (23.224–228);⁶¹⁴ the symptoms of poisoning by quadrupeds and its treatment (23.229–232); gara, prepared and administered mixed with food by women afraid to lose the favour of their husband or lover, is also dealt with, followed by the treatment of the victim (23.233–240).⁶¹⁵

The chapter ends with measures to be taken immediately after a bite (23.250–253)⁶¹⁶ and a concluding verse (23.254.)

Recipes with a name are pañcaśīrīṣāgāda (23.212–218)⁶¹⁷ and amṛtaghṛta (23.242cd–249).⁶¹⁸

Chapter twenty-four is about madātyaya (alcoholism and its complications).⁶¹⁹

Its subjects are: the eulogy of surā,⁶²⁰ honoured by gods and sages, used as an oblation in the sautrāmaṇī ritual,⁶²¹ etc.; the advice to use it properly (24.3–10); the proper way in general of consuming alcoholic drinks (madya) (24.11–20);⁶²² special prescriptions⁶²³ for persons with a vātika, paittika or ślaismika constitution (24.21–23),⁶²⁴ applicable to those who are wealthy or on the path to prosperity (24.24);

gaudika⁶²⁵ and paṣṭika⁶²⁶ drinks are suitable to those with a vātika constitution, mārīvika⁶²⁷ is suitable to a paittika, mādha⁶²⁸ to a ślaishmika constitution (24.25); the properties and actions of alcoholic drinks made from many different substances (24.26–28); alcoholic drinks, after reaching the heart, disturb the ten properties of ojas by their own ten qualities, thus causing mental disorder (24.29); the ten properties of alcoholic drinks are: laghu (light), uṣṇa (hot), tīkṣṇa (sharp), sūkṣma (subtle), amla (sour), vyavāyin (relaxation-promoting), āsuga (quickly acting), rūkṣa (dry), vikāśin (diffusive), and viśāda (clear); the ten properties of ojas are: guru (heavy), śīta (cold), mṛdu (soft), ślakṣṇa (smooth), bahala (gross),⁶²⁹ madhura (sweet), sthira (immobile), prasanna (slowly acting), picchila (mucilaginous), and snigdha (oleaginous); the properties of an alcoholic drink counteract those of ojas in the following way: laghu is contrary to guru, uṣṇa to śīta, amla to madhura, tīkṣṇa to mṛdu, āsuga to prasanna, rūkṣa to snigdha, vyavāyin to sthira, vikāśin to ślakṣṇa, viśāda to picchila, sūkṣma to sāndra,⁶³⁰ thus sattva, residing there (i.e., in the seat of ojas, the heart), is quickly disturbed and brings about mada (intoxication) (24.30–34);⁶³¹ the heart is the seat of the channels (mārga) transporting rasa, vāta, etc., as well as the seat of sattva, buddhi, the senses, and the primary ojas;⁶³² for that reason the heart, and the dhātus located there, are pathologically changed by the immoderate use of alcoholic drinks and the damage of ojas resulting therefrom (24.35–36);⁶³³ the first stage of intoxication⁶³⁴ is characterized by stimulation (pratibodhita) of the heart, without any damage (avihata) to the ojas; the ojas is slightly damaged in the second stage, more seriously so in the third stage; a paṣṭika alcoholic drink does not cause damage to the ojas, because the properties vikāśin, rūkṣa and viśāda are not predominant in it (24.37–38); alcoholic drinks produce mental changes (vikāra) of a rājasa and tāmasa character, culminating in confusion and sleep when used in excess; this pathological state caused by alcohol (madyavibhrama) is called mada (intoxication) (24.39–40); three stages (prathama, madhyama, antya or uttama) of intoxication are described; a special variety, between the second and third stages, occurring in those of a rājasa or tāmasa character, is added (24.41–51);⁶³⁵ the dangers of the improper and immoderate use of alcohol,⁶³⁶ and its merits as a medicinal substance (24.52–60); the beneficial effects of alcohol (24.61–67);⁶³⁷ alcoholic drinks are harmless when one pays due regard to the three types of foods, to drinks, age, disorders (vyādhi), strength, time, doṣa and character (sattva); this correct use is called yukti; a person with a sātvtika character may enjoy all the merits of alcohol (24.68–70); the mind (sattva) is stimulated in the first stage of mada, it loses its lucidity in the second stage, extremely so in the third stage; alcohol exposes the qualities of one's character, as fire exposes the qualities of gold (24.71–73); the sātvtika, rājasa and tāmasa ways of enjoying drinks (āpāna) (24.74–79); circumstances which make drinking for particular types of persons into a pleasant activity; persons who get drunk by a small quantity of alcohol (24.80–87); the aetiology and symptomatology of madātyaya dominated by vāta, pitta, kapha, and the three doṣas (24.88–100);⁶³⁸ the general symptoms of madātyaya (24.101–106); general principles regarding the treatment of madātyaya; kapha is to be counteracted first, pitta and vāta being secondarily involved; a disorder caused by a particular alcoholic beverage is alleviated by the administration of the same drink⁶³⁹

the list (26.117cd).

Five types of śīroroga (diseases of the head) are described: caused by vāta, pitta, kapha, saṃnipāta, and parasites (krimi) (26.118).⁷⁴⁶

Four types of mukharoga (diseases of the oral cavity) are described: caused by vāta, pitta, kapha, and saṃnipāta (26.119–122ab),⁷⁴⁷ their number is sixty-four⁷⁴⁸ with regard to their location (saṃsthāna), corruptible element(s) affected (dūṣya), symptoms (ākṛti),⁷⁴⁹ and name; the aetiology, symptomatology and treatment of these sixty-four diseases are discussed in surgical textbooks (śālākyaśāstra); the treatment of the four types mentioned will be described in the present treatise (26.122cd–123).⁷⁵⁰

Arocaka (anorexia) is of several types.⁷⁵¹ The symptoms of this disease, when caused by vāta, pitta and kapha, are described. Loss of appetite is the only symptom of the psychogenic varieties, brought about by grief, anxiety, greed, anger, disgusting smells, and foods which are disgusting to look at (26.124–126).⁷⁵²

Four types of kaṃaroga (ear disease) are described: caused by vāta, pitta, kapha and all three doṣas (26.127–128).⁷⁵³

Four types of netraroga (eye disease) are described: caused by vāta, pitta, kapha and all three doṣas; the treatises on śālākya deal with ninety-six of these diseases; the present treatise does not attempt to discuss them, because they belong to the domain of others (parādhikāra) (26.129–131).⁷⁵⁴

Khalati (baldness) arises when the bodily heat (tejas), together with vāta, etc., burns the scalp (keśabhūmi); when this action is mild, the hair turns grey (palita) or brown (hariprabhatva) (26.132).⁷⁵⁵

The diseases of the supraclavicular region (ūrdhvajatrūthagada) have partially been described now in order to fill up a lacuna (aśūnyatārtha) (26.133ab).⁷⁵⁶

The remaining part of the chapter is devoted to the treatment of pratiśyāya, pīnasa, and other diseases of the nose (26.134–157),⁷⁵⁷ diseases of the head (26.158–186),⁷⁵⁸ diseases of the teeth, oral cavity and throat (26.187–214),⁷⁵⁹ arocaka (26.215–220),⁷⁶⁰ diseases of the ears (26.221–230),⁷⁶¹ diseases of the eyes (26.231–262ab),⁷⁶² baldness,⁷⁶³ greying of the hair, wrinkles, etc. (26.262cd–282),⁷⁶⁴ and the five types of svarabheda (disorders of the voice): caused by vāta, pitta, kapha, blood, and saṃnipāta (26.283–290).⁷⁶⁵

Recipes with a name are: aṇutaila (26.239–241ab),⁷⁶⁶ māyūraghṛta (26.158–165),⁷⁶⁷ mahāmāyūraghṛta (26.166–174),⁷⁶⁸ kālakacūrṇa (26.194cd–196ab),⁷⁶⁹ pītākacūrṇa (26.196cd–198ab),⁷⁷⁰ khadīrādiguṭikā and -taila (26.206–214), sukhāvatī varti (26.252–253),⁷⁷¹ drṣṭipradā varti (26.254–256ab),⁷⁷² and mahānīlataila (26.268cd–276ab).⁷⁷³

Chapter twenty-seven, on ūrustambha,⁷⁷⁴ begins with Agniveśa asking his teacher whether there is a disease not amenable to treatment by means of pañcakarma and nevertheless curable. Ātreya replies that ūrustambha is such a disease (27.3–7).

The aetiology, pathogenesis, symptoms and prodromes of this disease are described; when āma (undigested matter), which has accumulated in the viscera, has, together with medas, obstructed vāta and the other doṣas, it descends, owing to its heaviness, to the thighs (ūru) and lower parts of the legs, impairing their mobility;

(vyakta) signs are the specific symptoms (ātmarūpa), while slight signs indicate subsidence (apāya) of the disease (28.19cd–20ab).

The general symptoms of excited vāta are enumerated (28.20cd–23). Peculiarities concerning cause(s) and location lead to particularities of the diseases which arise (28.24ab).

The symptoms of the disorders which appear when corrupted vāta has become lodged in a particular part or constituent of the body, or the whole body, are dealt with in the next section. The parts mentioned are: the viscera (koṣṭha), the whole body, ano-rectal region (guda), receptacle of undigested food (āmāśaya),⁷⁸³ receptacle of digested food (pakvāśaya),⁷⁸⁴ sense organs (indriya),⁷⁸⁵ skin (tvac),⁷⁸⁶ blood (rakta), muscular and fatty tissues (māṃsa and medas), bones and bone marrow (asthi and majjā), semen (śukra), cords (snāyu), vessels (sirā), and junctures (sandhi)⁷⁸⁷ (28.24cd–37).

Several specific diseases are described in the section that follows. These diseases are: ardita (facial paresis) (28.38–42),⁷⁸⁸ manyāstambha (28.43a-c),⁷⁸⁹ antarāyama (28.43d–45c),⁷⁹⁰ dhanuṣṭambha or bahirāyama (28.45d–48),⁷⁹¹ hanugraha (lockjaw) (28.49–50ab),⁷⁹² ākṣepaka (convulsions) (28.50cd–51ab),⁷⁹³ daṇḍaka (28.51cd–52ab),⁷⁹⁴ curable and incurable forms of the diseases mentioned (ardita up to daṇḍaka) (28.52cd–53ab), pakṣavadha (hemiplegia) (28.53cd–54),⁷⁹⁵ ekāṅgaroga (paresis or paralysis of one limb)⁷⁹⁶ and sarvāṅgaroga (tetraplegia) (28.55),⁷⁹⁷ grdhraśī (sciatica) and its two varieties (28.56–57ab),⁷⁹⁸ and khallī (28.57cd).⁷⁹⁹

The remaining disorders should be known from the signs characteristic of the seat (of vāta) (28.58ab); the combination of vāta with pitta, etc., should also be taken into consideration (28.58cd).

Excitation of vāta comes about through deficiency of dhātus and obstruction of pathways (mārgāvaraṇa);⁸⁰⁰ vāta, pitta and kapha move through all the channels; only vāta, due to its subtleness, is able to make the other two move about; when excited, it agitates the other two, hurling them to various places, where, due to this, diseases appear, brought about by pathways which are obstructed, thus leading to drying up of rasa, etc. (28.59–61ab).⁸⁰¹

The symptoms of the disorders are described which are the result of vāta being obstructed (or: covered, āvrta) by pitta, kapha, blood, muscular tissue, fatty tissue,⁸⁰² bone tissue, bone marrow, semen, food (anna), urine or faeces (28.61cd–72ab).⁸⁰³

Curable with difficulty or incurable are, due to their deep-seatedness: luxation of joints (sandhicyuti),⁸⁰⁴ lockjaw (hanuṣṭambha), contractures (kuñcana),⁸⁰⁵ kyphoscoliosis (kubjatā),⁸⁰⁶ ardita, hemiplegia (pakṣāghāta),⁸⁰⁷ desiccation (saṃśoṣa)⁸⁰⁸ of parts of the body,⁸⁰⁹ parigutva,⁸¹⁰ khudāvātātā,⁸¹¹ stambhana,⁸¹² ādhyavāta,⁸¹³ and the diseases caused by vāta when lodged in bones or bone marrow. These diseases may be treated when of recent origin, free from complications, and occurring in strong patients (28.72cd–74).⁸¹⁴

The treatment of the diseases described is discussed⁸¹⁵ (28.75–198).⁸¹⁶ Additional disorders referred to are: desiccation of a foetus (28.95) and of young children (28.95), vāta lodged in the cardiac region (28.96), umbilical region (28.97), arms (28.98) and head (28.98).

one in tuṣodaka (12.35ab), one kind of surā (12.35cd),¹⁰¹ one in a kaṣāya of kampillaka (12.35cd),¹⁰² and five in a ghee.¹⁰³

Three hundred and fifty-five emetic and two hundred and forty-five purgative preparations have thus been described, making a total of six hundred; all these preparations are mainly based on fifteen drugs (12.41–42).

The remaining part of the chapter is devoted to a number of interconnected subjects.

Some verses deal with general principles relating to compound recipes, the interaction of drugs, their potentiation (balādhāna), etc. (12.43–50).¹⁰⁴

The next group of verses (12.51–86) is concerned with general rules relating to the treatment of patients with emetic and purgative measures. These evacuative measures are of three types: drastic (tīkṣṇa), of medium strength (madhya), and mild (mr̥du) (12.51–57). Diseases are of three types too: severe (tīkṣṇa), of medium strength (madhya), and mild (mr̥du), according to the number of symptoms present (12.58).

Dosages are important in this context, which explains that the units of weight (māna, pramāṇa, parimāṇa) are discussed (12.87–97): 6 dhvaṇṣī¹⁰⁵ = 1 marīci; 6 marīci = 1 sarṣapa; 8 (rakta)sarṣapa = 1 taṇḍula;¹⁰⁶ 2 taṇḍula = 1 dhānyamāṣa; 2 dhānyamāṣa = 1 yava;¹⁰⁷ 4 yava = 1 aṇḍikā; 4 aṇḍikā = 1 māṣaka,¹⁰⁸ also called hema and dhānyaka; 3 māṣaka = 1 śāṇa; 2 śāṇa = 1 drañkṣaṇa, also called kola and badara; 2 drañkṣaṇa = 1 karṣa,¹⁰⁹ also called suvarṇa, akṣa, biḍālapadaka, picu, pāñitala, tinduka, and kavala-graha; 2 karṣa = 1 palārdha (half a pala), which is also called śukti and aṣṭamikā; 2 palārdha = 1 pala,¹¹⁰ also called muṣṭi,¹¹¹ prakūñca, caturthikā, bilva, ṣoḍaśikā, and āmra; 2 pala = 1 prasṛta,¹¹² also called aṣṭamāna; 4 pala = 1 añjali,¹¹³ also called kuḍava;¹¹⁴ 2 kuḍava = 1 mānikā; 4 kuḍava = 1 prastha;¹¹⁵ 4 prastha = 1 āḍhaka,¹¹⁶ also known as pātra; 8 prastha = 1 kaṁsa; 4 kaṁsa = 1 droṇa,¹¹⁷ also called armaṇa, nalvaṇa, kalaśa, ghaṭa, and unmāna; 2 droṇa = 1 śūrpa or kumbha; 2 śūrpa = 1 goṇī, also called khārī¹¹⁸ and bhāra;¹¹⁹ 32 śūrpa = 1 vāha; 100 pala = 1 tulā.¹²⁰

Rules are given for the dosages of fresh and dried medicinal substances,¹²¹ the ratios of liquids in relation to the drugs in a compound recipe, etc. (12.98–101).¹²² The preparation of fat-containing compound drugs (oils, ghees) is described; this so-called snehapāka is of three types: mr̥du (mild), madhya (medium), and khara (firm), according to the consistency of the final product; the indications of these three products of snehapāka are mentioned (12.102–104).¹²³

The two systems of weights and measures which are employed in medicine are referred to in a verse considered to be spurious (anārṣa) by Cakrapāṇi; the Māgadha system is said to be superior to the Kālīṅga system (12.105).¹²⁴

makes the fixed (sthira) doṣas flow out (viṣyandayati) of the body after application of sneha, as fire acts upon damp wood; śodhana (purification) eliminates the impurities (mala = doṣa), as dirt is removed from a cloth by water (6.11–13); a purificatory drug should not be taken during a disorder of digestion (ajīrṇa) (6.14); characteristics of a proper dose (6.15–17); the preparatory diet (6.18–19ab); the signs of proper elimination (6.19cd–20); removal of the remains of too large a dose (6.21–22ab);³³ the treatment to be applied when the signs of proper digestion of the drug are not observed (6.23); after-treatment (6.24); the treatment to be applied when kapha and pitta are only slightly eliminated (6.25);³⁴ signs indicating proper and improper digestion of the drug (6.26–27); types of improper administration (6.28); ten disorders (vyāpad) due to improper purification are enumerated:³⁵ ādhmāna (tyimpanitis), parikartī,³⁶ srāva,³⁷ hṛdgraha,³⁸ gātragraha,³⁹ jīvādāna (bleeding), vibhramśa,⁴⁰ stambha (stiffness), upadrava (complications), and klama (exhaustion) (6.29–30); cases of wrong application of purificatory measures and their treatment (6.31–57);⁴¹ the symptoms and treatment of ādhmāna (6.58–60),⁴² parikartikā (6.61–67),⁴³ parisrāva (6.68–70),⁴⁴ hṛdgraha (6.71–75),⁴⁵ āṅgraha (= gātragraha) (6.76–77), jīvādāna (6.78–84),⁴⁶ the three types of vibhramśa: gudabhramśa (prolapse of the rectum), saṃjñānāśa (loss of consciousness), and a syndrome characterized by kaṇḍū (itching) and other signs (6.85–87), stambha (6.88–89),⁴⁷ upadrava (6.90–91),⁴⁸ and klama (6.92–93).⁴⁹

Chapter seven, called bastivyāpatsiddhi, deals with the disorders caused by the improper administration of enemas.

Twelve of these disorders (vyāpad) are enumerated: deficient application (ayoga), over-application (atiyoga), klama (exhaustion),⁵⁰ ādhmāna (tyimpanitis), hikkā (hiccup), hr̥tpṛāpti,⁵¹ ūrdhvatā (moving in an upward direction),⁵² pravāhikā,⁵³ śīroṛti (headache), āṅgārti (pains in the whole body), parikarta,⁵⁴ and parisrava⁵⁵ (7.5–6).

The causes, symptoms and treatment of these disorders are described: ayoga (7.7–11), atiyoga (7.12–14), klama, due to a remnant of āmadoṣa (7.15–20),⁵⁶ ādhmāna (7.21–26),⁵⁷ hikkā (7.27–29), hṛdayaghaṭṭana (= hr̥tpṛāpti; 7.30–31), ūrdhvatā (7.32–39), pravāhikā (7.40–42),⁵⁸ śīroṛti (7.43–46), āṅgārti (7.47–53), parikartikā (7.54–57), parisrava (7.58–62).⁵⁹ The composition of drastic (tīkṣṇa) and mild (mr̥du) enemas is dealt with (7.63).

The chapter ends with some general statements on the action of enemas (7.64–65).

Chapter eight, called prāśṛtayogīyasiddhi, begins with a number of formulations (yoga) for enemas, expressed in the unit of weight called prasṛta.⁶⁰ These enemas are especially suitable to delicate (sukumāra) patients and those suffering from the bad effects of improperly applied evacuative measures (8.3–18).⁶¹

One of the formulations is called pañcatiktanirūha (8.8–9ab).⁶²

The second part deals with diarrhoea (atisāra) as a disorder arising from the injudicious administration of enemas. Six main types are distinguished: accompanied by āma, or pakva (i.e., devoid of āma) and accompanied by faeces, vāta, blood, pitta or kapha; thirty subtypes are distinguished according to the combinations of doṣas involved. This diarrhoea may lead to various complications (upadrava), such as śūla

sthāvara-jātānām snehānām); 25.39 (ālukaṃ kandānām should precede nikucaṃ phalānām); 25.40 (lāmajjakoṣṭre is preferable to lāmajjakoṣīram and nirvṛttiḥ puṣṭikarāṇām to nirvṛttiḥ puṣṭikarāṇām; the second niḥsaṃśayakarāṇām should be replaced by nirbhayakarāṇām); 26.3 (Hiraṇyākṣa Kuśika should be substituted for Hiraṇyākṣa Kauśika); 26.43(4) (mohayati instead of mohayanti); 26.84 (sarṣapatailabhṛṣṭān instead of sarṣapatailabhraṣṭān); 27.4 (vetrāgrāmṛtā- instead of vegāgrāmṛtā-); 27.25 (sa svādūḥ is preferable to tat svādūḥ);¹²⁸ 27.55 (jaṅgalacāriṇaḥ instead of jāṅgalacāriṇaḥ); 27.92 (kālākhyam instead of kālāyam);¹²⁹ 27.101 (-nālikāsuryaḥ instead of -nālikāsūryaḥ); 27.122 (sārṣapaṃ śākam is odd among the group of kandaśākas);¹³⁰ 27.128 (vātapitte praśasyate is better than vātapitte ca śasyate); 27.163 (madhurāṇy anupākīni instead of madhurāṇy amlapākīni); 27.216 (varuṇālaye instead of varuṇālayam); 28.4 (prasādākhyāḥ malākhyāś ca instead of malākhyāḥ prasādākhyāś ca); Ni.3.10 (sabubhukṣasya instead of abubhukṣasya);¹³¹ Ni.4.14 (ikṣvālīrasasaṃkṣāśa should be read instead of kāṇḍekṣurasasaṃkṣāśa);¹³² Vi.3.45 (tīvrādhārinarucer instead of tīvrādharmārucer); 4.5 (jñānasamudayena instead of jñānasamudāyena); 5.8 (arocakāvīpākau instead of arocakavīpākau); 5.26 (annavahānām instead of annavāhānām);¹³³ 7.17 (trirātram instead of trivāram);¹³⁴ 8.11 (mādhūkībhir instead of mādhukībhir); 8.109 (śikharadaśanāḥ is preferable to śikharadaśanāḥ);¹³⁵ Śā.1.143 (vratacaryopavāśaś ca instead of vratacaryopavāśau ca);¹³⁶ Śā.5.4 (śaddhātavaḥ samuditāḥ loka iti śabdaṃ labhante instead of puruṣa iti śabdaṃ labhante); 8.3 (strīpuṃsayor avyāpannaśukraśoṇitagarbhāśayaḥ should be replaced by strīpuṃsayor avyāpannaśoṇitagarbhāśayaśukrayoḥ);¹³⁷ 8.24 (viśamāsana should replace viśamāśana); 8.47 (kṣemaka instead of kṣaumaka; kaṇakaṇikendhana instead of kaṇakakaṇṭakendhana);¹³⁸ I.2.19 (kaścid evāśya vairasyam instead of kaścid evāśyavairasyam); 5.17 (piban instead of pibet); I.5.34 (pādavarmaṇoḥ instead of pādacarmaṇoḥ); 11.21 (āhvayantaḥ is preferable to āhvayaṃ tam); 12.19 (varma vicyutam is preferable to carma vicyutam); Ci.1.36b (āmalakeśv api is better than āmalakīśv api);¹³⁹ 1.2.15 (aṣṭabhāgena instead of akṣabhāgena);¹⁴⁰ 2.8ab (sāndrībhūtaṃ tam kuryāt prabhūtamadhuśarkarāḥ instead of sāndrībhūtaṃ ca kuryāt prabhūtamadhuśarkaram);¹⁴¹ 3.54cd (saptāhaṃ vā daśāhaṃ vā dvādaśāhaṃ suduḥ-sahaḥ is preferable to daśāhaṃ dvādaśāhaṃ vā saptāhaṃ vā suduḥsahaḥ);¹⁴² 5.77c (śūlānāharaḥ instead of śūlānāharaḥ); 6.26 (surāhvaṃ instead of surāhvam);¹⁴³ 6.40 (savalkām instead of sakalkām); 7.111 (sailā instead of śailā); 7.120 (rajas instead of payas); 7.123 (pakvasurā is to be replaced by śakrasurā);¹⁴⁴ 7.140 (ardhapalāṃśaṃ is more correct than ardhadalāṃśaṃ); 8.58 (śleṣmāśayastham is preferable to āmāśayastham);¹⁴⁵ 9.22 (-pāṇiḥ instead of vāṇiḥ);¹⁴⁶ 13.48 (anudakaprāptam udaraṃ is better than anudakam aprāptam udaraṃ); 13.88–89ab (the correct order is 88ab, 89ab, 88cd); 13.119cd–124ab (iti paṭolādicūrṇam should be inserted after the formula); 14.43 (iṣṭakasya should be replaced by dīpyakasya); 14.228–229 (iti picchābasthiḥ should come after 228); 14.243 (śtōṣṇāni ca yojayan instead of yojayet); 14.252 (saśarkarāḥ instead of saśarkarāḥ); 14.253ab (dvaividhyaṃ instead of dvividhaṃ); 14.253cd (peyaś ca instead of peṣyāś ca); 15.35 (sthalam nimnam ivodakam is preferable to sthalān nimnād ivodakam); 15.89 (kolāmla instead of kolāmbu); 15.97 (cānalam instead of cālanam); 15.205 (sa ghṛtaṃ instead of saghṛtaṃ); 15, colophon

142; Si.9.51); aśvakhuraka²⁵¹ (Ci.23.245); aśvāvarohikā²⁵² (Si.10.37); atirasā²⁵³ (Sū. 4.10 and 18; Ci.10.35); ātmajā²⁵⁴ (Ci.3.267); avaghāta²⁵⁵ (Ci.7.129); avaghātaka²⁵⁶ (Ka.8.3); avākpuṣpi²⁵⁷ (Vi.8.151; Ci.7.114; 14.234; 29.62); avaroha²⁵⁸ (Ci.3.267); avyathā²⁵⁹ (Sū.4.18; Śā.8.20 and 58); bahulā²⁶⁰ (Ci.8.103); bahuphenarasā²⁶¹ (Ka. 11.3); balāhaka²⁶² (Ci.23.11); balbaja²⁶³ (Śā.8.41; Ci.1⁴.7; 5.138); bhadraparṇi²⁶⁴ (Vi.8.135); bhadrāudani²⁶⁵ (Sū.4.9); bhaṇḍi²⁶⁶ (Sū.27.107); bhāradvājī²⁶⁷ (Sū.4.9; Vi.8.139); bhilvapariṇi²⁶⁸ (Sū.27.107); bodhivṛkṣa²⁶⁹ (Ci.29.158); brhatpattrā²⁷⁰ (Ka.9.3); buka²⁷¹ (Ci.30.82); cakramudgaka²⁷² (Sū.21.25); cañcu²⁷³ (Ci.19.32); cāraṭi²⁷⁴ (Ci.9.45); carmakaṣā²⁷⁵ (Ci.23.66); carmasāhvā²⁷⁶ (Ka.11.3); chattra²⁷⁷ (Sū.27.123); cīna²⁷⁸ (Sū.27.14); cīnaka²⁷⁹ (Ni.4.5; 5.6); cirbhata²⁸⁰ (Sū.27.112; Ci. 19.32); cukrikā²⁸¹ (Ci.8.131; 14.199 and 202; 15.89; 24.151); cukrikā²⁸² (Ci.15.114; 24.151); cuñcuparṇikā²⁸³ (Sū.27.100); daṇḍairakā²⁸⁴ (Ci.26.51; Ka.1.25); dardura²⁸⁵ (Sū.27.14); dāruniśā²⁸⁶ (Ci.6.40); devatāḍaka²⁸⁷ (Ka.2.3); dhanañjaya²⁸⁸ (Ci.4.75); dhanvayāsa(ka)²⁸⁹ (Sū.4.11 and 14; Ci.3.204 and 207; 4.46; 7.145; 18.178; 21.58; 26.170); dhanvayāvāsa²⁹⁰ (Ci.14.186); dhāvanī²⁹¹ (Ci.3.187 and 224); dugdhikā²⁹² (Ci.8.131; 14.198; 21.83; 26.266); dvārādā²⁹³ (Vi.8.139; Ci.1⁴.15); dvīpi²⁹⁴ (Vi.8. 135); dvīpikā²⁹⁵ (Ka.1.22); dvīpiśatru²⁹⁶ (Vi.8.135); eḍagaja²⁹⁷ (Sū.3.3, 13, 15; 27.33; Ci.7.93, 103, 113, 126, 127, 160, 161); ekāṣṭhila²⁹⁸ (Si.10.23); elāparṇi²⁹⁹ (Vi.8.135); erakā³⁰⁰ (Sū.3.24 and 27; Ci.29.134); gandhana³⁰¹ (Sū.27.14); gandhaphalā³⁰² (Ci.23.57); gāndhapriyaṅgu³⁰³ ((Sū.25.40; Śā.8.24; Ci.21.90); garāgarī³⁰⁴ (Ka.2.3; Si.11.12); garmūti³⁰⁵ (Sū.27.18); gaura³⁰⁶ (Sū.27.8 and 13); girimallikā³⁰⁷ (Ka.5.4); gopi³⁰⁸ (Vi.8.135); guḍā³⁰⁹ (Ka.10.8); hāridraka³¹⁰ (Sū.26.84); hastiparṇi³¹¹ (Sū.1. 82); hastiparṇinī (Sū.1.84); hastiśyāmaka³¹² (Sū.27.17); hayagandhā³¹³ (Ci.28.173); hemadugdhā³¹⁴ (Ka.12.23); heman³¹⁵ (Sū.3.29; Ci.11.40; 12.36; 21.74; 24.159; 25.116 and 117); hiṅguparṇi³¹⁶ (Ci.9.57); hiṅgupattrikā³¹⁷ (Ci.9.66); hiṅguśivāṭika³¹⁸ (Ci.10.37; 15.109); hintāla³¹⁹ (Ka.1.8); ikṣuvālā³²⁰ (Ci.26.73); ikṣuvālīkā³²¹ (Sū. 4.12; 25.49; Ni.4.10; Vi.8.135; Śā.8.29; Ci.2¹.24; Ka.1.25); ikṣuvālīka (Ci.11.18); indrā³²² (Ka.7.19); indrāhva³²³ (Ci.14.160); indrāṇi³²⁴ (Ci.21.85 and 90); indrasā- hvā³²⁵ (Ci.6.42); indrāyudha³²⁶ (Ci.23.12); jālamālīnī³²⁷ (Ci.23.206); jalapippalī³²⁸ (Sū.27.171); japā³²⁹ (Ci.1³.57); jayā³³⁰ (Ci.9.45); jhīṇṭi³³¹ (Sū.27.18); joṅgaka³³² (Ci.1⁴.15); jūrṇāhva³³³ (Sū.21.25; 27.18); kākāhvā³³⁴ (Ci.21.90); kākāṇḍa³³⁵ (Sū. 27.34); kalamba³³⁶ (Sū.27.101); kālaṅkataka³³⁷ (Ka.1.25); kālaṅkrta³³⁸ (Vi.8.135); kanaka³³⁹ (Ci.7.74; 23.78); kanakapuṣpi³⁴⁰ (Ci.7.167); kāṇḍīra³⁴¹ (Ci.3.267); Ka. 1.25); kapikacchu³⁴² (Ci.9.80; 11.62; 28.125 and 160); kapolavallī³⁴³ (Vi.8.139); kapotavallī³⁴⁴ (Vi.8.139); karkaṣa³⁴⁵ (Sū.27.97; Vi.8.143); karkatāhvaya³⁴⁶ (Ka.7. 18); karkatākī³⁴⁷ (Ci.18.51 and 153); karkotākī³⁴⁸ (Ka.4.3); karṇikāra³⁴⁹ (Ka.8.3); kāṣṭhagodhā³⁵⁰ (Ci.1⁴.7); katambharā³⁵¹ (Ci.9.47); kaṭuphalā (Ci.23.66; ³⁵² Ka.4. 3); ³⁵³ kauntī³⁵⁴ (Ci.9.35; 12.65; 23.55; Si.8.13); kāyasthā³⁵⁵ (Ci.9.46 and 57; 10.46 and 48; 17.141; 26.83); kelūṭa³⁵⁶ (Sū.27.114); khaṇḍikā³⁵⁷ ((Sū.27.28); kharāhva³⁵⁸ (Sū.23.15; 27.172; Ci.14.43); kharāśvā³⁵⁹ (Ci.26.60; Si.9.8); kilima³⁶⁰ (Vi.8.142; Śā.8.34 and 41; Ka.7.15); kokanada³⁶¹ (Vi.6.17); kolavallī³⁶² (Ci.3.210); koṣātaka³⁶³ (Ka.6.9; Si.3.56); koṭhaphala³⁶⁴ (Si.11.12); koṭhaphalā³⁶⁵ (Ka.4.3); krauñca³⁶⁶ (Ci.23.11); krauñcādana³⁶⁷ (Sū.27.116; Ci.3.258; 14.9); kṛmihara³⁶⁸ (Ci.7.153); kṛṣṇacitraka (Ci.26.272); kṛṣṇapiṇḍita³⁶⁹ (Ci.26.272); kṛṣṇasāireyaka³⁷⁰ (Ci.26.268);

16.28 and 121; 20.42; 26.224);⁵⁹³ mṛttikā (Sū.14.46; Ci.1².11; 1⁴.21; 2⁴.26; 4.66; 16.27 and 117; 19.65; 27.49, 51, 54; Ka.1.9);⁵⁹⁴ pāṃśu (Vi.3.7; I.12.28; Ci.1⁴.59; 23.39 and 174); pāṣāṇa (Sū.14.26 and 58; 27.209 and 210; Ci.21.131);⁵⁹⁵ rasa (Ci.7.71);⁵⁹⁶ rasottama (Ci.25.116);⁵⁹⁷ romaśa (Ci.29.152);⁵⁹⁸ saugandhika (Sū.3.10);⁵⁹⁹ saurāṣṭrī (Ci.7.114; 15.138);⁶⁰⁰ saurāṣṭrikā (Ci.30.79 and 98);⁶⁰¹ śilāhvaya (Ci.1³.65; 26.99);⁶⁰² śilājatu⁶⁰³ (Sū.21.24; 24.56; Ci.1³.48, 56, 58, 62; 5.97; 7.72; 13.152 and 153; 16.88; 23.213; 28.242; 29.159);⁶⁰⁴ sphaṭika (Ci.1⁴.22; 17.125);⁶⁰⁵ suvarcikā (Sū.2.23);⁶⁰⁶ suvarṇamākṣika (Ci.7.71);⁶⁰⁷ svarjikā (Vi.7.17; Ci.23.215);⁶⁰⁸ tāpya (Ci.16.78; 26.250);⁶⁰⁹ tuttha (Sū.3.12; Ci.7.108, 114 and 120; 26.250);⁶¹⁰ vaigandhika (Ci.23.223);⁶¹¹ veśmadhūma (Ci.26.14).⁶¹²

This survey may be useful in facilitating an assessment of the employment of inorganic substances in the *Carakasamhitā*⁶¹³ and comparisons with other texts.⁶¹⁴

The inorganic substances mentioned are prescribed in various forms, both externally and internally.⁶¹⁵ Some of these substances were heated before use.⁶¹⁶ Many of them were administered in the form of a powder (cūrṇa, rajas),⁶¹⁷ either singly or in combination with other drugs.

The intricate processes known from alchemical and later āyurvedic treatises are absent from the *Carakasamhitā*,⁶¹⁸ though some are convinced that distillation is mentioned.⁶¹⁹ The term bhasman is employed in a sense that differs from its alchemical use.⁶²⁰

Mercury is not yet known as a medicinal substance. The term rasa⁶²¹ (Ci.7.71) refers back to the juice extracted (nigṛhīta) from the plant called jāti (Ci.7.70).⁶²²

A substance called rasottama, sometimes thought to be mercury,⁶²³ is prescribed once, for external use in a lepa (Ci.25.116).⁶²⁴

The meaning of this term is a problematic issue. The presence of the verse that contains the prescription in a number of treatises gives the opportunity to compare the interpretations of various commentators. Cakra says that rasottama is either pārada (mercury) or ghee. Indu regards it as mercury (pārada). Among the commentators on the *Hṛdaya*, Aruṇadatta is silent, while the *Kairālī* agrees with Indu; Śivadāśasena, though identifying rasottama as pārada, adds that some are of the opinion that ghee is meant. The *Hṛdayaprakāśa* of the *Aṣṭāṅga* *hṛdayakośa* records that ghee is meant, though many (predecessors) identify rasottama as pārada. The *Śivadīpikā* considers it to be rasā-ñjana. The *Kusumāvalī* on the *Siddhayoga* remarks that rasottama is either pārada or ghee according to Cakra (pāṇidatta), or the juice (rasa) of sahakāra (i.e., the mango) according to Jinadāsa. Śivadāśasena comments (ad *Cakradatta*, vṛaṇaśoṭha 101) that rasottama is pārada, while others regard it as ghee. Niścalakara mentions that Cakra sees ghee in it, while Jinadāsa interprets it as the sweet juice of sahakāra; he himself is convinced that ghee is meant, because this is the substance corresponding to rasottama in an equivalent recipe of Jātūkarṇa quoted by him.

This survey of the various interpretations makes clear that it is far from certain, even improbable, that mercury is mentioned in the *Carakasamhitā*.

The more sober view that the *Kāśīkāvṛtti* and a number of Purāṇas refer to the Vedic school called Carakaśākhā, without postulating any connection with the *Carakasāṅghitā*, is also represented.⁸⁴ The Carakas of this śākhā are, for example, mentioned in Viśvarūpa's commentary on the *Yājñavalkyaśmṛiti*.⁸⁵

It is not clear which Caraka is meant in a passage of Jayantabhaṭṭa's *Nyāyamañjarī*,⁸⁶ where Caraka and others are described as able to reach a decision, by means of perception (pratyakṣa), on the power (śakti) of substances (padārtha), either combined or single (samastavyasta), relative to the variability of country, time, the individual (puruṣa), and the stage of the life cycle (daśā).⁸⁷

The Caraka mentioned by Śāntarākṣita is undoubtedly the Caraka of the *saṅghitā*.⁸⁸

Some passages of Vedic texts which mention a Caraka or use related words are subject to disagreeing interpretations. The Carakācārya of the *Taittirīyabrāhmaṇa* is, according to Sāyaṇa's commentary, someone who teaches the art of walking on bamboo stilts (vaṃśāgranartana),^{88a} i.e., a kind of dancer (nataviśeṣa); this explanation, pointing to a person of a low social status, is accepted by the Gulabkunverba team and Hemarājaśarma,⁸⁹ while others prefer to see in this Carakācārya a teacher of the Carakaśākhā.⁹⁰ The *Vājasaneyisaṅghitā* is, like the *Taittirīyabrāhmaṇa*, acquainted with a Carakācārya who is enumerated among the victims at the human sacrifice called *puruṣamedha*; this person is regarded as a teacher of the Carakaśākhā, denounced as the representative of a rival school,⁹¹ as a person of low status,⁹² a roaming mendicant (bhikṣu),⁹³ or the medical authority Caraka.⁹⁴

The form of the Sautrāmaṇī ritual called Carakā, usually thought to be connected with the Carakaśākhā, was supposed by A. Hillebrandt to allude to the medical teacher Caraka.⁹⁵

Other references also show that Caraka is a well known name in Vedic literature.

The Carakas formed one of the schools (śākhā) of the Black Yajurveda⁹⁶ and are subdivided into twelve ramifications in the *Caranavyūha*⁹⁷, one of the *Parīśiṣṭas* of the *Atharvaveda*. One of the recensions of the Black Yajurveda, the *Kāṭhakasaṅghitā*, may be connected with the Carakas⁹⁸ and be based on an older and lost *Carakasāṅghitā*,⁹⁹ because the Kāṭha school called itself Carakakāṭha¹⁰⁰ or Cārāyaṇīyakāṭha in order to distinguish it from the school of the Kapiṣṭhalakāṭhas. The precise extent of the term Caraka is, however, uncertain and it may have been applied to the whole or part of the Black Yajurveda.¹⁰¹

The Carakaśākhā was opposed to the *Taittirīyaśākhā* of the Black Yajurveda,¹⁰² and, to a still greater extent, to the schools of the White Yajurveda, represented by the *Vājasaneyisaṅghitā*.¹⁰³

One passage from the *Taittirīyasaṅghitā* has become the starting point of brisk discussions about a possible relationship between the Carakaśākhā and the practice of medicine. This passage¹⁰⁴ censures the twin healing gods, the *Aśvins*, as impure beings because they are physicians who roam about (cara) in the human world; a *brāhmaṇa* should therefore not practise medicine.

J. Filliozat has argued that the use of the term cara is a shot at the rival school of the Carakas,¹⁰⁵ who have not inserted anything similar in their *saṅghitās*, the *Kāṭhaka-* (27.4), *Kapiṣṭhalakāṭha-* and *Maitrāyaṇisaṅghitā*, which relate a similar story about the

great divine sages (devarṣi), the science of medicine came down from the gods to the human world, to the king of Benares; it was called the divine Brāhma system.³⁶

The biography of G-yu-thog yon-tan mgon-po mentions six systems of medicine: the system of binding diseases by spells, which belongs to the Asuras, the *Gso-dpyad hbum-pa* of Brahmā, the Bodhisattva system, laid down in a text called the Mercy of self-release, the *Ca-ra-ka sde-brgyad* of the ṛṣis, the *Mahādevatantra* of the non-Buddhists, and the *Rigs-gsum mgon-po rgyud* of the Buddhists.

Other Tibetan medical works referring to Caraka are the *Dpag-bsam ljon bzai* of Sum-pa mkhan-po,³⁷ the *Mkhas-paḥi dgaḥ-ston* of Chos-rgyal don-grub,³⁸ Jayapaṇḍita's biography of G-yu-thog-pa in the *Thob-yig*,³⁹ and the *Śes-bya kun-khyab* of Hjam-mgon koṅ-sprul blo-gros mthaḥ-yas.⁴⁰

Chapter 13

Authorities associated with the Carakasamhitā

Atri

Atri¹ is the name of a priestly family already found in Vedic literature. Many hymns of the *R̥gveda*, in particular of maṇḍala five, are attributed to the Atris and members of their family, the Ātrayas.² A number of myths about an individual seer called Atri are referred to in the *R̥gveda*, *Atharvaveda* and some Brāhmaṇas. One of these myths tells that the Aśvins saved him from a burning pit;³ once, the Aśvins are said to have made him young again.⁴

Atri is a well known sage in many branches of Sanskrit literature. He is often mentioned in the epics, Purāṇas, etc.⁵ He belongs to the group of seven seers (saptarṣi),⁶ and is one of the lords of created beings (Prajāpati).⁷

Atri's name is connected with a number of sciences,⁸ such as dharmaśāstra,⁹ jyotiṣa,¹⁰ vāstusāstra,¹¹ and medicine.

Medical authors and works referring to or quoting Atri are: the *Bṛhannighaṇṭurātākara*,¹² *Carakasamhitā*,¹³ *Haṃsarājānidāna*, *Hārītasamhitā*,¹⁴ *Kāśyapasaṃhitā*,¹⁵ *Lakṣmaṇotsava*, Nṛsiṃhabhaṭṭa's *Tāmbūlakalpasamgraha*, Pālakāpya's *Hastyāyurveda*,¹⁶ Aśubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*,¹⁷ Śivadāsaśena,¹⁸ Tōḍara,¹⁹ Vāgbhaṭa's *Aṣṭāṅgahrdayavaidūryakabhāṣya* and *Aṣṭāṅgasamgraha*,²⁰ Vāṇeśvara Bhaṭṭācārya's *Rasaratnadīpikā*,²¹ Vāsudeva's *Vāsudevānubhava*, Viśvanātha Dvivedī's *Rasendrasambhava*,²² and the *Yogarātgnākra*.²³

Vāsudeva's *Vāsudevānubhava* mentions among its sources, next to Atri, a *Bṛhadatri* and *Laghvatri*. These works are reminiscent of similar versions of the *Ātreyasamhitā* (= *Hārītasamhitā*).²⁴

An *Atrisamhitā* is referred to or quoted in Baladeva Prasāda Misra's *Āyurvedacintāmaṇi*,²⁵ Jivānandavidyāsāgara's commentary on the *Rasendrasārasamgraha*,²⁶ Raṅgajyotirvid's *Vicārasudhākara*,²⁷ and the commentary of Aśubodha and Nityabodha Senagupta on the *Rasaratnasamuccaya*.²⁸

Quotations from Atri and the *Atrisamhitā* may actually be from the *Hārītasamhitā*.²⁹

Noteworthy features of these quotations and references are: an *Atrisamhitā* is mentioned, occasionally next to an *Ātreyasamhitā*; Atri takes the place of Ātreya in some traditions about the origin of āyurveda; Atri is identified with Kṛṣṇātreya; some recipes are attributed to him; a definition of a drug action (saṃśamana) and descriptions of yantras (and a puṭa) are ascribed to him; he is interested in elephantology.

its contents fully agree with verses which do form part of its text (Ca.Ci.3.53cd–61 ab). Probably, Vāgbhaṭa summarized the essence of what he knew to be the opinion expressed in the *Carakasamhitā*; however, one cannot exclude that he was acquainted with a view traditionally ascribed to Agniveśa. This does not mean at all that the evidence collected from Vāgbhaṭa's works proves that the *Agniveśatantra* was available to him.

G. Mukhopadhyaya's allegation that Agniveśa's work still existed when the old *Sauśrutatantra* was redacted by Nāgārjuna and became known as the *Suśrutasaṃhitā*,²²⁶ rests on very slender evidence. The *Suśrutasaṃhitā* does not mention Agniveśa's name; it only refers to the treatises of the six kāyacikitsā specialists²²⁷ and several other groups of experts, used in the composition of the *Uttaratantra* (Su.U.1.4cd–8ab); this is a statement of the same type as that found at the beginning of Vāgbhaṭa's works.

The claim of many Indian authors that the *Agniveśatantra* remained accessible for many centuries, up to the times of Cakrapāṇidatta, Vijayarakṣita, Śrīkaṇṭhadatta and Śivādāsaśena,²²⁸ is not supported by solid evidence;²²⁹ it rests on the shaky basis of the uncritical acceptance of the genuineness of the quotations and on the conviction that the occurrence of these quotations means that MSS containing the complete text were still extant. Acknowledgment of the additional quotations found in Ṭoḍara's *Āyurvedasaṃhita* and Anantakumāra's *Yogarātnasamuccaya*, neglected by the majority of Indian authors or unknown to them, would oblige them to raise the limit of the period in which the *Agniveśatantra* could be consulted. It would, moreover, be hard to explain that in the period of compilation of Ṭoḍara's *Āyurvedasaṃhita* a large body of material from the *Agniveśatantra* could be collected that was overlooked by the commentators on the classical medical treatises.

The majority of the citations referred to by these authors in order to substantiate their claims are of the nature of *paribhāṣās*; these technical rules belong to a special group of quotations which are probably from an *Agniveśasaṃhitā*, a work that impresses as entirely different from the *Agniveśatantra* and of a later date. *Paribhāṣās* do not form part of the *Carakasamhitā* and are usually found in the commentarial literature or specialized works like the *Bheṣajakalpa*, attributed to Bharadvāja.

As I have already mentioned, the quotations attributed to Agniveśa belong to several groups. In my opinion it is impossible to decide whether or not some may be from the old *Agniveśatantra*, because of the absence of reliable criteria. No one knows what the *Agniveśatantra* looked like, in spite of assertions to the contrary.²³⁰ P.V. Sharma has advanced the hypothesis that the *Agniveśatantra* was a work in *sūtra* style, resembling the *Arthasāstra*; Caraka expanded the text, rewrote the descriptions of the assemblies of sages in the form of dialogues and added the summaries at the end of each chapter.²³¹ The same author has tried to isolate elements of the *Carakasamhitā* that in his view belong to its oldest layer, i.e., the *Agniveśatantra*.²³²

The quotations do not support the hypothesis that Agniveśa's work mainly consisted of *sūtras*; by far the larger part of the citations are in verse.²³³

Peculiarities found in quotations from Agniveśa which throw doubt on their authenticity or point to a date later than Dṛḍhabala's completion of the *Carakasamhitā* are: the use of the term *ekarūpa yakṣman* for an epidemic disease;²³⁴ the absence of

that Patañjali was known as a medical authority to the authors of a *Yogarātnākara*⁶²⁰ and *Yogarātnasamuccaya*.⁶²¹ Āśubodha and Nityabodha Senagupta reproduce, in their commentary on the *Rasarātnasamuccaya*, some quotations from Patañjali and the *Pātañjala* found in Śivadāsa's commentary on the *Cakradatta*.⁶²²

Satyanārāyaṇaśāstrin's *Padārthavijñāna* also quotes Patañjali and the *pātañjalāḥ*; some of these quotations are, however, from the *Carakasamhitā*.⁶²³ A quotation from the *Pātañjaladarśana* in Yogendranātha's *Āyurvijñānarātnākara* is from the *Yogasūtra*.⁶²⁴

Govindadāsa's *Bhaiṣajyaratnāvalī* contains a recipe attributed to Patañjali.⁶²⁵

The references and quotations in the works of Āśubodha, Govindasena, Kāśīrāma, Nīścala, Śivadāsasena and Trivikrama indicate that Patañjali's work dealt with metallurgy (*lohaśāstra*) and its application to medicine. B. Seal claims that Patañjali gave elaborate directions for many metallurgic and chemical processes, especially the preparation of metallic salts, alloys and amalgams, and the extraction, purification and assaying of metals; he adds that it was probably Patañjali who discovered the use of the mixtures called *viḍa*. B. Seal regards Patañjali's *Lohaśāstra* as a later work than that of Nāgārjuna on the same subject, an opinion based on the observation that the former's directions concerning particular processes are more complicated than those of the latter.⁶²⁶

Other medical writings ascribed to Patañjali are a *Vātaskandha* and *Siddhāntasārāvalī*; the latter work incorporates a *Paṭtaskandha*.⁶²⁷

The Indian tradition regards Patañjali as the author of a lost tantra on *rasāyana*.⁶²⁸ Al-Bīrūnī was acquainted with Patañjali's association with *rasāyana*.⁶²⁹

Patañjali is the name of at least two famous authors; the one wrote the *Mahābhāṣya*, the other the *Yogasūtra*.

An interesting development made the two fuse into one Patañjali, who, in addition to his expertise in grammar and yoga, was also credited with a thorough knowledge of medicine and allied subjects.

The medical works already referred to are often attributed to this composite Patañjali, as well as a commentary on the *Carakasamhitā*, Vārttikas on that work, or a revised version of it. As a further complication, he is even considered to be identical with Caraka.

The threefold Patañjali is mentioned as a *pratisaṃskartar* of the *Carakasamhitā* in the introductory verses of Cakrapāṇidatta's *Āyurvedaṭīkā*.⁶³⁰ His Vārttikas on the *Vaidyakaśāstra* are referred to in Rāmabhadraḍṣita's *Patañjalicarita*,⁶³¹ written at the end of the seventeenth or the beginning of the eighteenth century.⁶³² The tradition that a Patañjali wrote Vārttikas on the *Carakasamhitā* is endorsed by G. Hāldār, who asserts that Vijayarakṣita, in his part of the *Madhukōśa*, quotes one of these Vārttikas,⁶³³ which, after having existed independently, were incorporated in the text of the *Carakasamhitā* in the first century A.D.⁶³⁴ The same author is convinced that one of Patañjali's Vārttikas is cited in Nāgeśabhaṭṭa's (*Vyākaraṇasiddhānta*) *mañjūṣā*.⁶³⁵ The claim that Patañjali made additions to the text of the *Carakasamhitā* was also advanced by Sūramcandra.⁶³⁶ Gaṇanātha Sena⁶³⁷ regarded him, in agreement with Cakrapāṇidatta, as a *pratisaṃskartar* of the *Carakasamhitā*.

